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ABSTRACT

These four consumer citizenship curriculum guides for social studies, English, science, and mathematics incorporate consumer education into these subject matter areas in grades 8-12. Each guide is organized around 10 main component/goals. They are basic economics in the marketplace, credit, consumer law/protection, banking skills, comparison shopping for goods and services, advertising and our society, responsible budgeting, insurance, taxes, and conservation of energy and resources. Each specific objective under the goals lists performance indicators and suggested evaluation for each one. A taxonomy provides the teacher with consumer knowledge related to the performance indicator. Suggested learning experiences provide activities directly or indirectly related to the specific objectives. Learning experiences for the gifted and slow learner follow the social studies, English, and science guides. A section for the gifted in mathematics follows the mathematics guide. Appendixes include the Consumer Citizenship Curriculum Guide Grid, descriptions of the slow learner and gifted child, and a partially annotated list of selected resources. (YLB)

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CONSUMER CITIZENSHIP CURRICULUM GUIDES
FOR
SOCIAL STUDIES
ENGLISH
SCIENCE
MATHEMATICS

By
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U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
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Preface

Consumer education is a continuous, lifelong process to be included at every level of the educational structure. Continued exposure to consumer education in many forms is extremely important in making general consumer concepts an integral part of every student's background and preparation for life.

The purpose of these four Consumer Citizenship Curriculum Guides for Social Studies, English, Science and Mathematics is to weave consumerism into subject matter areas which may not usually include consumer education. Every effort has been made to incorporate the philosophy of each subject matter area as seen by present leaders and teachers. These Guides have been written to meet the Rhode Island state law that requires schools to provide consumer education in grades 8 - 12. This document is based on the Rhode Island Consumer Education Curriculum Guide which should be used in conjunction with the Consumer Citizenship Guides.

Learning experiences for the gifted and slow learner follow the Social Studies, English and Science Guides. A section for the gifted in Mathematics follows after the Mathematics Guide. A description of the gifted and slow learner appears in the appendix.

Louise MacKenzie
Project Director
University of Rhode Island
May, 1981

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social studies

Forward for Social Studies

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The Consumer Citizenship Curriculum Guide for Science has been developed to help Social Studies teachers incorporate some parts of the Rhode Island Consumer Education Curriculum Guide in their subject matter area. All of the objectives covered in the R.I. Guide have not been included in this Social Studies Guide. A Grid may be found in the Appendix. It gives a detailed picture of the objectives chosen for Social Studies, English, Mathematics as well as Social Studies. Hopefully, as the student moves through these four subject matter areas the objectives will be adequately covered. The R.I. Guide does not assign numbers to any of the components or specific objectives; however, in this Social Studies Guide we have done so.

Social Studies Philosophy

The following rationale for social studies education was adopted from the Revision of the NCSS Social Studies Guidelines prepared by the National Council for the Social Studies (1979).

The basic goal of social studies education is to prepare young people to be humane, rational, participating citizens in a world that is becoming increasingly interdependent. A commitment to foster human dignity and rational process are the key to the structure of the social studies curriculum. There is a complimentary and inseparable nature of knowledge, reason, commitment to human dignity and action in social studies. The Citizenship Guide has attempted to structure each objective so that students may have experience in (1) Knowledge -- a provision of a reservoir of data, ideas, concepts and theories (2) Abilities -- thinking competencies that provide a means for problem solving and help in decision making (3) Valuing -- an examination of personal and societal values and (4) Social Participation -- the application of the educational efforts in the social area.

Social Studies strives to provide consumer education in as many ways as possible. As a result Social Studies teachers help students understand the consumer role in the content of our national economic, political and social systems and to appreciate the global interdependence of consumers. Social Studies provides students with conceptual tools for their future use rather than technical information which may become outdated.

How to Use This Guide

1. Study the Guide format which gives the main component, the goal, Social Studies contribution and specific objectives.
2. Each specific objective lists performance indicators, the Social Studies objective used and the suggested evaluation for each performance indicator.
3. The taxonomy will help teachers understand the consumer knowledge related to the performance indicator.

Forward for Social Studies (cont.)

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4. Suggested learning experiences provide activities which are directly or indirectly related to the specific objective. No effort has been made to provide a complete list of learning activities; however, we have made an effort to suggest some of the more unusual activities. Study the performance indicator and then select, rearrange and add suitable activities to provide the learning experiences desired.
5. No attempt has been made to place the suggested learning experiences in a specific order or sequence.
6. Some learning experiences for the gifted and slow learner appear after component 10.

1. BASIC ECONOMICS IN THE MARKETPLACE

Goal: Understanding the nature of the basic economic problem of scarcity where people, with unlimited wants and needs, live in a world of limited resources.

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
1.1 The student will be able to identify and explain the basic elements of the contemporary American market place.	<p>1.11 Define pertinent terms.</p> <p>1.12 Describe traditional, command and market economics.</p> <p>1.13 Give characteristics of the American Economic system. Provide examples of major influences and problems.</p> <p>1.14 Respond to the question, "Do we have a free market place?" Indicate your own values.</p>	<p>Knowledge</p> <p>Abilities</p> <p>Abilities</p> <p>Values</p>	<p>Short answer quiz</p> <p>Summary Sheet of 3 Economic systems; diagrams of systems</p> <p>Objective quiz; narrative essay from "Cottage Industry to Today."</p> <p>Debate</p>

Taxonomy

1.11 Terms and concepts pertinent to the marketplace:
 Economic freedom: Freedom of choice to buy or to reject.
 Economic growth and stability: Total value of all the goods and services produced in a year. (Gross national product).
 Inflation: Rapid price increase that decreases consumer buying power.
 Economic stability: Monetary and fiscal policies which help regulate money and credit.

Suggested Learning Experiences

Debate:

- The effectiveness of traditional, command or market economies.
- What role should the government play in the American economy? Should it be a watchdog?
- What role should advertising play? Should there be more or less control over advertising?
- What role should business play in the

Taxonomy

1.11 (cont.)

Economic security: Steady income, both present and future.

Economic justice: Distribution of wealth in a fair and equitable manner.

Monopoly: Relatively complete control over price and quantity of product produced is held by one or more sellers.

Oligopoly: a market situation in which a few producers affect but do not control the market.

Economic systems: People working together to use their scarce resources.

Economic voting: People vote for a product or service by spending money for it and thus accepting it.

Monetary policy: Regulation of money and credit.

Fiscal policy: Government spending and taxation.

1.12 Primary economic systems:

Traditional -- Economic life is determined by such things as habit, custom, and religious traditions.

Command or Directed Economy -- Basic economic decisions are made by a central authority.

Market Economy -- Consumers determine the nature and prices of goods and services produced.

Suggested Learning Experiences

economy? What freedoms and restrictions? How can business be made accountable?

Provide examples of ways the consumer is helped in the American economy. Give examples of injustice. Identify possible solutions.

Watch newspapers for incidents that would indicate when greater controls are needed to restrain monopolistic or oligopolistic business operations.

Select or originate case studies that show the effects of inflation and deflation on:
a retired person
the store keeper who buys a large quantity of stock
the wage earner on weekly pay
the home owner
a high school student

Student projects: Study a locally produced product. Trace it from raw material to finished product noting factors which contribute to the economy.

Classroom simulation of supply and demand through an auction, using token money.

Bring in newspaper articles which show monetary and fiscal policy at work in the U.S. economy.

Taxonomy

1.13 In the United States the economy should probably be labeled as "market-oriented". It has:

- Private property -- Americans have incentives and the right to buy and own personal and business property, but the government serves as a "watchful eye".
- Free enterprise -- Americans can produce anything governed only by restrictions in the public interest. There is government control in that unsafe goods are not to be made (nor can people print their own money!).
- Profit motivation -- the desire for income left after paying all expenses can be either positive or negative. When positive it can lead to personal wealth and increased national development. When negative it can lead to exploitation of consumers, businesses and even governments.
- Competition -- for survival, a business must be operated effectively and efficiently if it is to survive. Helps to keep quality up and prices down, and reasonable quantities produced.
- Supply and demand -- necessary to answer how much is to be produced and at what price to sell the products. There is continual bargaining between producers and consumers in the marketplace. Ultimately, barring extreme controls or market restrictions, the price that consumers are willing to pay for goods will be close to that which the producers are willing to produce and sell.

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Suggested Learning Experiences

Compare and contrast any two presidents' economic policies. They may be of the same or different parties. They must however be successive or consecutive. Also, it would be easier to pick presidents who were (or are) in the midst of some economic turmoil. State their dilemma, how they chose to resolve it and what its effect was on the general public.

Students bring in examples from newspaper and magazine articles of government agencies and regulations which act in the public interest.

Interview three people who work at three different jobs (blue collar, professional, teenager). Make a list of the machines that help them do their work. Explain briefly how each machine works and how the job would get done if the machine weren't available. Ask the three people how much longer it would take to do their work if they did not use any machines.

Using newspaper -- bring in examples illustrating how the market system may be over-powered by government regulation or industry power. In what industries (products, services) does the market system actually operate? Which industries are controlled by a "guiding hand" from government or business?

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Taxonomy

1.14 The American economy tries as much as possible to operate with open competition, but there are government regulations. Through fiscal policies the government can affect economic activity its own spending, and by raising or lowering taxes. Through monetary policies, the government can raise or lower discount rates, adjust the reserve requirement ratio and buy and sell government securities (open market operations). The federal government's role in the economy is largely regulatory and we are faced with the question, "How much regulation is good?"

Suggested Learning Experiences

Discuss profit motive, competition, government intervention, property ownership and other influences on the economy.

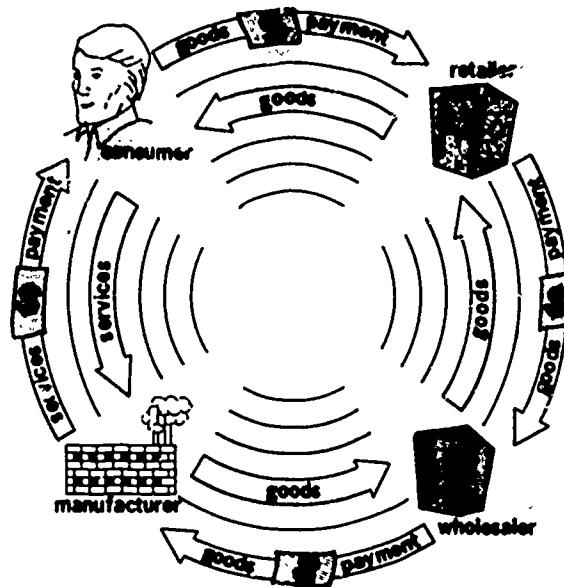
<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
1.21 The student will develop an awareness of the interaction between supply, demand and the price mechanism.	1.21 Describe the circular flow of money in the economy.	Knowledge	Objective test
	1.22 Analyze influences on the economy which affect supply, demand and prices.	Abilities	Problem solving
	1.23 Given the breakdown of the circular flow of money in a free enterprise system, predict problems that might occur.	Abilities and Values	Essay question

Taxonomy

1.21 Circular Flow:
 Business depends on people to do work.
 People depend on business to employ them.
 Business depends on consumers to buy.

Suggested Learning Experiences

Use a circular flow diagram to illustrate how the flow of economic activity works.
 (See diagram)



Money flow goes from consumers to business in payment for the produced goods and from business to consumers in payment for labor services.

Government plays a roll as regulator.
None of the parts can stand alone.

1.22 Influences on the economy which affect supply, demand and economy:

Consumer demand
Prices
Promotion of goods
Scarcity of resources
Regulation by government
Monopolies
Distribution of income

Wages and salaries
Consumer action
Competition
Distribution
Services
Expected level of living

Brainstorm all possible considerations by which wages are determined for the following:

factory worker	secretary
barber	lawyer
nurse	waitress

Or, the chalkboard provide a large example of the circular flow. Students list an economic difficulty and then diagram the domino effect.

Discuss examples of public and private monopolies and their effect on the free enterprise system.

What is a level of living? What is each student's present level? How does it compare with parents? Grandparents?

Taxonomy

1.22 (cont.)

Natural resources
 Cultural influences
 Human resources
 Gross national product per capita income

1.23 A breakdown in the circular flow of money can bring about inflation, depression, or other economic problems dependent in part on values which also affect the economy (environmental, personal expectations, life style and political).

Suggested Learning Experiences

How do teenagers' spending habits affect the economy? What do merchants do to encourage teenagers to spend their money?

Do a values continuum. Students place themselves in a line ranging from "I prefer to live on the land, producing all of my own goods" to "I want to live in a society where I pay for all of the goods and services I use."

Specific Objective

1.3 The student will understand how consumer decisions influence the use of personal resources to maximize satisfaction.

Performance Indicators

1.31 Identify the components that make up a life style.
 1.32 Describe how decision-making affects a life style.
 1.33 Defend and criticize the "American Way of Life."

Level

Knowledge

Suggested Evaluation

Short answer quiz

Abilities

Objective test

Values

Written paper

Taxonomy

1.31 Some components of a life style can be identified as:

Energy usage
 Environment
 Education
 Cultural pursuits
 Health
 Transportation
 Services

Family size
 Psychological health
 Family background
 Age
 Vocation
 Protection
 Recreation

Suggested Learning Experiences

List factors which determine differences in consumers.

Recall when you were last a consumer and list the factors which influenced your consumer decision.

List ten goods and services common today that were not available to consumers fifty years ago.

Taxonomy

1.32 Some bases for decisions..

- Values, goals, needs, wants and resources form the bases. All are interrelated and interdependent.
- Values serve as guide from which alternatives can be chosen.
- Goals are those things desired towards which energies are directed.
- All persons have similar basic needs, but when choices are made, different life styles emerge.
- Individuals and families have different resources available to them.
- Good management of resources can increase satisfaction.

1.33 The American Way of Life stands for abundance and quantity, but many people are excluded. To be questioned are:

- Quality of air, water, food, services, recreation, etc.
- Fairness of competition
- Housing
- Medical services
- Racism
- Poverty
- Question of what we are building toward: bigger and better junkyards or responsible choice making as well as production
- Welfare regulations

Suggested Learning Experiences

Contrast consumer decisions of American teenagers with those of 25 years ago and 25 years from now.

Discuss, "Every choice is an economic vote."

Use a transparency of Maslow's Hierarchy of Needs to illustrate basic needs.

Develop lists of "needs", "conveniences", "luxuries". Is there agreement among students?

Debate: Is a family's standard of living chiefly determined by its income or values and goals?

Discuss "earning a living" and "living a life" and the implications for a life style.

Identify the components of a life style about which one makes decisions.

Cite examples of how the quality of life of individuals and families affects the national welfare.

How is the American way of life changing due to worldwide economic conditions? i.e., "interdependent world" philosophy.

Specific Objective

1.5 The student will understand the interdependent nature of the market system

Performance Indicators

1.51 List economic concepts needed to understand the market system

Level

Knowledge

Suggested Evaluation

Short answer quiz

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
	1.52 Illustrate the inter-relationship of the American economy and consumers' activities.	Abilities	Short answer quiz
	1.53 Using one major consumer decision show the repercussions of a major consumer decision, e.g. your vote to increase taxes for improved police protection.	Values	Chart showing effects of decision

Taxonomy

1.51 Some components of a life style can be identified as:

- Freedom of choice -- limited by laws, regulations, business practices, customs and habits. Freedom exists for both producers and consumers.
- Opportunity cost -- those things we must do without when we decide upon some particular allocation of productive resources. There is "freedom to choose", but one must judge what choice "costs".
- Income -- the nation's output and income is the Gross National Product (GNP). One must consider the flow of goods and services. Consumer income uses include savings, investments, credit, borrowing, assets, insurance.
- Private and public consumer interests -- freedom of choice includes the right to

Suggested Learning Experiences

Compare economic activity with the view from the observation deck of the Empire State Building in New York City. Drivers make individual decisions but the traffic pattern is recognizable.

Using the phrase, "It is good to save part of your income for a rainy day", discuss the effect on the individual. How would the economy react if everyone suddenly saved their money and spent less?

React to Senator Gaylord Nelson's comment that "There is a lack of balance in the consumer's capacity to deal equally with the guy who's got an item to sell".

What is the difference between money income and real income? How do they each affect the market?

Taxonomy

1.51 (cont.)

satisfy wants through either private or public expenditures. Must weigh alternatives (if want added police protection, taxes will go up).

1.52 The American economy is a market system. It is also an economy producing a flow of goods and services and also a flow of income to buy these products. This flow is related to the individual's income. Individual consumer behavior can affect the total flow of income.

1.53 Freedom of choice includes choices from either private or public possibilities. Choices will affect both the private and public sectors of the economy.

2. CREDIT

Goal: Understanding that credit properly used is a tool to reach economic goals.

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
2.1 The student will identify the role of credit in personal money management.	2.11 Define credit. Identify who obtains credit and for what purposes.	Knowledge	Objective test
	2.12 List and illustrate advantages and disadvantages of using credit.	Abilities	Short answer questions
	2.13 When provided with case studies, make personal decisions concerned with the need for use of credit.	Valuing	Problem solving

Suggested Learning Experiences

Discuss:

- Spending for things today vs. saving for the future.
- Balancing spending for food, clothing and shelter vs. spending for entertainment and recreation.
- Undertaking extra work vs. spending that time on leisure.
- Comparing the potential benefits of higher education with the cost and sacrifices it normally requires.

Investigate pros and cons of each and give possible outcomes:

- Proposition 2 1/2 (Massachusetts)
- Proposition 13 (California)

Taxonomy

2.11 "Credit" -- to pay for the use of someone else's money. Businesses borrow to acquire more capital. Governments borrow to fund national needs and to cover deficits. Consumers borrow to buy major articles, take advantage of sales, consolidate debts, level out monthly payments for necessary goods or services or use as a supplement to an emergency fund.

2.12 The borrowers

Advantages of credit

- shop without carrying much cash.
- act in an emergency when cash may not be available.
- use goods and benefit from services at same time that payments are made.
- consolidate costs of goods and services and therefore budget for them.
- make purchases when the price is right.

Disadvantages of credit

- tends to encourage overbuying.
- tends to reduce short-term buying power, since interest costs must be paid as well.
- decreases thrift and savings and makes it difficult for consumers to have cash for emergency expenses.
- obligations can result in bankruptcy if there is a sudden reduction of income.
- often reduces goal setting by families saving for the future.
- cost of goods and services is increased by finance charges, further reducing the consumer's cash balance.
- creates a false sense of security because of the possession of goods. (Garman & Eckert. 1978. p. 195.

Suggested Learning Experiences

Write different definitions for credit on the chalkboard.

Discuss: Where do banks get the money they lend to customers? What is the future of money? Is it becoming obsolete? Will we have a cashless society? Can you avoid using credit?

Use case studies to determine the advisability of using credit.

Discuss the advantages, disadvantages and alternatives to using credit for different purposes such as education, clothing, household needs, vacations, medical bills, etc.

Debate: Credit shall be restricted to emergencies and absolute necessities.

The Egyptians had a form of credit more than 10,000 years ago when they recorded transactions (in hieroglyphics) on papyrus. Research this in the library.

Discuss bartering during the settling of the colonies.

Investigate the history of credit. When was it first instituted? On what terms? Who were the first creditors? What was (and is) the public's attitude toward credit? Who seeks credit most nowadays? Is there a trend toward more or less credit-seeking than before?

Taxonomy

2.12 (cont.)

The Savers

Can make money available for borrowers and thus benefit from the interest on their loans. In short, if it were not for the borrowers, the savers would have no place in which to invest savings.

Society as a Whole

Credit extension can lead to increased demand and therefore increased production of goods and services, thus helping to maintain full employment. On the other hand consumer credit may contribute to economic instability because it must take something away from investment spending or consumer spending on nondurable consumer goods and thus contributes to a lower rate of economic growth. The overextension of credit may also lead to inflation, extravagance and general lack of prudence. An increased demand for goods and services can pull up prices.

2.13 All of the following are options which face customers. Value judgements are necessary for decisions.

- Cash should also be recognized as a negotiable financial commodity. Credit costs are reflected in the cost of items. Should cash customers pay for the service they do not use?
- Getting credit is often too easy. Whose responsibility is it for the restriction of credit options?

Suggested Learning Experiences

Given the pros and cons of credit extension, take a stand and debate the advantages and disadvantages of your personal choice. You could start off by pitting "full-employment vs. economic instability."

Compare interest rates on savings to interest rates for consumer loans. What factors account for the differences?

Use case studies to determine the advisability of using credit.

Investigate major credit card companies and their interest rates. Check with various stores and see if there is a "discount" of any sort for paying with cash rather than credit.

Get various applications for credit from all types of different stores--department stores, hardware stores, specialty shops, etc. Compare applications--are they long, complicated, extremely investigatory, etc. How many ask for income, how long you've had your job, where you live and how long, etc. Also, investigate what happens to non-payers of debt in terms of the laws and attachment of wages.

Simulation: Give each student a \$10,000 credit limit and auction off a limited number of items such as cars, stereos, etc. Then increase the credit limit (or token money) to \$20,000 and continue auction. Determine how this affects savings and prices.

Taxonomy

2.13 (cont.)

- Does the explosion of credit mean we are headed for a cashless society? Are there enough safeguards?
- When is it wise for an individual to use credit?

Suggested Learning Experiences

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
2.2 The student will recognize types, sources and costs of credit for different purposes.	2.21 Define ten terms related to credit. 2.22 Cite and define three types of credit, and describe four sources of cash loans.	Knowledge Abilities	Objective test Prepared paper
	2.23 When provided with case studies, decide what type of credit you would use for a particular purchase, and where you would go for a cash loan in each instance.	Values	Individual or group response to case studies

Taxonomy

2.21 Terms related to types of credit:

Credit card--an identifying card which allows the holder to charge goods and services.

Finance company--a company in the business of making loans.

Suggested Learning Experiences

Collect examples of consumer credit: Charge plate, promissory note, installment contract, advertisements of consumer lending agencies, brochures on the "budget" plan of a discount store, phone bill, and others.

Collect credit agreement forms such as applications contracts and chattel mortgages as

Taxonomy

2.21 (cont.)

Installment credit--"closed end" type of credit arrangement in which the buyer agrees to make payments of a specified amount to be paid at a given time each month or week, for a given length of time.

Liability--any obligation one must honor.

Maturity date--the day the last payment in a credit contract is due.

Non-installment credit--credit involving single payment transactions.

Open account--payment made in thirty to ninety days.

Open-end credit (revolving credit)--customer is provided with a "line of credit" up to a certain amount, usually with the privilege of repaying in full at the end of each billing period and avoiding finance charges.

Optional charge account--a charge account combining features of regular and revolving charge accounts allowing the consumer a choice of paying the full amount of the bill, or paying a portion of it and carrying the balance over to the next month.

Original balance--the amount of a debt before any payments are made.

Outstanding--obligation not yet paid.

Overdue--not paid by date payment is due.

Overextended--owes more than can pay.

Suggested Learning Experiences

they apply to charge accounts, lay away, installment credit and cash loans.

Investigate how a credit bureau or a credit check company finds out if a person is a "good" risk or "bad".

Collect ads for credit and underline actual information given.

Examine differences between reputable and disreputable creditors and draw up a list of things to look for when shopping for credit.

Go to any loaning institution--bank, credit union, Savings and Loan Association, mutual savings banks, personal-loan agencies, pawn-brokers, loansharks, etc. Apply for a hypothetical loan from any 3 of the above and record the payment schedule, interest rates, items such as what happens with non-payment of debt, and other pertinent information.

Compare the advantages and disadvantages of long and short-term credit.

Is there a way to live in society without ever using any type of credit. Write a story in which you depict a credit-less family. Start off with "boy meets girl...fall in love...get married." Follow it through to purchases like a car, house, having kids, etc.

Taxonomy

Suggested Learning Experiences

2.21 (cont.)

Pledge--something of value given by a debtor to a creditor as security for payment of the debt.

Sales Finance Company--a business which purchases the accounts receivable of other businesses and then makes collection of the amounts due.

Savings and Loan Association--an institution set up to make loans, usually for the purchase or improvement of real estate, and to offer incentive to members for saving.

Secured loan--a loan for which the consumer puts up some form of security.

Short-term credit--credit repaid in a single transaction.

Co-signer--accepts responsibility to pay debt should need arise.

2.22 Types of credit

- Service credit. Doctor, dentist, plumber, etc.; Usually no cost when paid on time.
- Sales credit. From retail stores
 - regular charge account. Paid for in specified time and usually no charge.
 - revolving credit. Given maximum amount can spend based on credit record. Monthly payments made on portion of outstanding debt with interest on unpaid balance.
 - credit card account. Combine features of 30-day charge account and revolving account. No charge if paid within stated time. Must pay a portion of what is owed each month and a monthly service charge.

Taxonomy

2.22 (cont.)

- installment account. Used for large purchases. A contract is signed on an agreement made for regular payments over a period of time. Down payment usually made at time of purchase. Payments include portion of outstanding balance, interest, and any other charges.
- Cash loans
 - installment loan. Handled same as installment account.
 - single-payment loan. Agree to pay back entire loan-plus interest in one payment.

Sources of cash loans

Banks and Savings and Loan Associations
Finance Companies
Credit Unions
Life Insurance Companies
Pawnshops
Illegal lenders

These sources differ in interest they charge, amounts of money they will loan, the amount of security they require and the length of the repayment period, and who they will loan money to.

Because of variations within each lending agency, cost differences should be dealt with at the time a loan is considered. Consumers should shop for credit to obtain the best terms and conditions possible.

2.23 Each situation where credit is considered should be viewed separately to determine (a) whether credit is actually desirable and (b) what the best source of credit may be.

Suggested Learning Experiences

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Select a typical family (perhaps your own would feel most comfortable sharing this information with you) and add up from every available source of credit how much interest this family pays. Weigh how much enjoyment the family gets from the items it gets on credit. Is it worth it? Explain.

Call a lending institution and ask for the prevailing rate on a personal loan or a car loan. Make a chart in class.

Use case studies to determine what type of credit you would use and the best available source of cash credit, in each case.

Taxonomy

2.23 (cont.)

Borrowing is a typical and essential activity in the American economy. It is important to know why, how and from whom consumers borrow.

Suggested Learning Experiences

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
2.3 The student will understand the benefits of establishing a sound credit rating.	2.31 Define credit rating	Knowledge	Short answer quiz
	2.32 Describe and interpret the Fair Credit Reporting Act	Abilities	Essay test
	2.33 Explain the criteria used for granting credit including the point system and make conclusions concerning the maintainance of a good credit rating.	Abilities	Problem solving test
	2.34 Itemize the pros and cons of establishing a credit rating and defend a position.	Values	Essay response to a problem situation.

Taxonomy

2.31 A credit rating shows how one uses credit. It shows a "credit trust". Ratings for individuals are accumulated and provided by credit reporting agencies. Paying cash will not help establish or build a rating.

2.32 Fair Credit Reporting Act: The name and address of an agency submitting a negative credit rating report must be given by anyone denying credit. The discredited person

Suggested Learning Experiences

Use case studies of people refused credit. Students make use of Fair Credit Reporting Act to discuss cases.

Using the following point system, students establish descriptors for each category and give themselves a credit rating.

Occupation	0-7 points
Job tenure	1-5 points
Residence	0-5 points

Taxonomy

2.32 (cont.)

may then ask for the information the credit reporting agency has on file. If there is false information, the discredited person has the right to know who verified it and what was said. The original source can then be checked.

2.33 Criteria for granting credit:

1. General behavior, attitude and personality of person (character)
2. Person's earning power and ability (capacity)
3. Net worth of the individual (capital)
4. Items of value the person can use as security (collateral)

The point system allots points for various criteria that tend to make for good credit-risk. (e.g., occupation, job tenure, income, etc.)

A Credit Bureau collects and keeps files or information on credit practices of individual consumers. This information is made available to subscribing credit grantors and other businesses. (Also, by law, must be made available to the consumer concerned.)

2.34 One must understand what credit is, what it can do and can't do, what its obligations are and what the responsibilities are. Only then can decisions be made concerning the use of credit and the desirability of establishing a good rating.

Suggested Learning Experiences

Time at present address	1-3 points
Bank accounts	2-6 points
Income	0-5 points
Credit references	-2 to +2 points

Investigate the following: who obtains credit more than any other group (age-wise), what, in descending order, are the items most frequently purchased by credit. What does a credit rating mean? How long is "bad-credit" kept on record? How does one obtain credit at 18 years of age and at 65? Is there any sex discrimination as far as credit is concerned?

Have you borrowed or brought on credit before? If so, from whom, and when? What was your payment schedule like? How does earning power compare with bills needing monthly payments? What provisions for repayment do you have in case of illness or injury?

Examine a real bank loan application. What is the purpose of each question? What are they trying to find out about you?

Fill out a bank loan application, imagining yourself at age 22 taking a car loan.

Specific ObjectivePerformance IndicatorsLevelSuggested Evaluation

2.4 The student will understand the use of credit in terms of present and

2.41 Define debt limit

Knowledge

Objective quiz

2.42 Interpret debt limit for specific situations.

Abilities

Problem solving

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
2.4 (cont.) future needs, wants, expenses and income.	2.43 Specify debt limit you would assume personally given an income of \$10,000 (or same specific amount)	Values	Problem solving

Taxonomy

2.41 Debt limit--the amount of debt one can assume when present income and responsibilities are considered as well as future outlook. For instance a person with rising income might assume more debt than one who is planning to retire soon. One must consider the ability to handle an added expense in view of the present budget.

2.42 Some financial experts suggest a debt limit of 10-15 percent of your income after taxes. However, this is inaccurate in that many extraneous factors must be considered--age, future anticipated income, size family, financial obligations beyond those normal, etc.

2.43 Some fifty years ago, few people were willing to assume credit burdens. Credit, however, has become a way of life to varying degrees for different individuals. Each person should view his/her own situation and analyze his/her personal feelings about assuming debt. Only then can intelligent decisions be made concerning the amount of debt each individual can assume.

Suggested Learning Experiences

Prepare a display illustrating the changing needs and uses of credit by a family at different stages of the life cycle.

Discuss: What effects does credit have on your life?

Question: In our society can an individual or family completely avoid using credit?

Discuss: How does past debt affect distribution of future income?

Interview parents and grandparents to determine their attitudes toward the use of credit. Compare your findings with other class members. Is there a relationship between age (or generation) and attitudes toward the use of credit?

Do a case study of a person who seemed to be too immature to handle credit. They overextended their debt limit for certain reasons. How and why does it happen? How can it be avoided? What should be done in schools to avoid it?

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
2.5 The student will understand the decisions that come into play influencing borrowing.	2.51 Define borrowing, using examples of at least six possible loans.	Knowledge	Objective questions
	2.52 List six consumer "do's" and six consumer "don'ts" concerned with credit.	Abilities	Problem solving
	2.53 Illustrate a buyer decision matrix.	Abilities	Outline of matrix
	2.54 Develop a matrix for one consumer-decision and determine own responses. Answer: Should I go into debt to solve this problem?	Values	Outline of matrix with personal responses.

Taxonomy

2.51 Borrowing (or credit) is obtaining the means by which goods and services can be made available. With the move toward a cashless/checkless society the consumer can more and more simply "sign" when a purchase is made. This charge sales type of borrowing may now be added to the many other forms of borrowing which have previously existed. Among installment loans are those for automobiles, other durable consumer goods, repair and modernization and personal. Among the non-installment loans are single payment, charge accounts, revolving credit plans and service credit.

2.52 Some do's:
 • know how payments will be met before signing a credit application.

Suggested Learning Experiences

Discuss the dollar cost of credit using interest tables. Explain APR (true annual percentage rate).

Run a contest on which group of students can discover the most do's and don'ts in regard to obtaining credit.

Practice developing matrices using consumer decisions the students choose.

Debate decisions made from matrices.

Refer to 2.4 and debate decision to go or not to go into debt.

Taxonomy

2.52 (cont.)

- know how much you will have left after all of necessary expenses and payments are taken out.
- know what the cost of the credit will be.
- determine how much more the item will cost because of the credit.
- shop for the best credit arrangement, by comparing the APR.
- analyze the deal before you sign for it.
- get a copy of any credit agreement you sign.

Some don'ts:

- be pressured by a smooth talking salesman.
- be pressured by the emotional pleas of a salesman.
- be stampeded into signing immediately to take advantage of a "hot deal".
- buy anything that you don't want just because it is cheap.
- take unnecessary charges. Buy from dealers with whom you have confidence.
- expect to erase debt by returning merchandise.
- buy something you don't need.
- sign something you have not read completely.
- sign something different from what salesman told you about.
- allow contracts to be "switched".
- sign a contract if it contains blank spaces.

2.53 The evaluation of goods and services can be made on a 1-5 rating range. To use the matrix, consider one problem, e.g., the need of a form of transportation in order to get to work. The consumer might consider four types of transportation, bus, bicycle, car, motorcycle. The matrix might appear as follows.

Suggested Learning Experiences

Carrying charges and interest are sometimes "hidden" charges. They are often different depending on store, type of goods sold, or other special items. Get copies of many different contracts and discover "loopholes". Then discuss types of people who could easily be fooled by these contracts.

Find out how much extra you pay for goods because stores have to make some money to pay the overhead of billing, keeping records, going to court for nonpayment of bills, etc.

What is a promissory note? Discounting? Investigate these terms and give examples of how they work.

Debate a decision to go or not to go into debt.

TaxonomySuggested Learning Experiences

2.53 (cont.)

Attribute

5 4 3 2 1

Achievement of primary goal (without effort)	(none)
Multiple purpose uses (several)	(only one)
warranty (full coverage)	(none)
Required up-keep (seldom)	(frequently)
Safety (injury easy)	(injury impossible)
Price (free)	(highest price)
Unique upkeep	
Availability (within minutes)	(never)

Scores can then be given for each attribute and a decision made.

2.54 Having observed the do's and don'ts and having made a decision making matrix, then the question of whether to go into debt should be answered with the material in 2.4 in mind.

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
2.6 The student will be aware of the changes inherent in the over use of credit.	2.61 Define reposess, bankruptcy, garnishment, default, collateral, debt adjuster, delinquent, lien	Knowledge	Objective quiz

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
	2.62 List and describe three warning signs that too much credit is being used.	Abilities	Essay question
	2.63 List and describe four ways financial difficulties can be handled.	Abilities	Essay question
	2.64 When provided with a case study of a family in debt "over their head", outline the procedures to be followed (including time span and priorities) to allow the family to remove the debt.	Values	Problem solving

Taxonomy

2.61 Repossess--to take back or recover goods from a purchaser who fails to pay for them according to the terms of the contract.

Bankruptcy--a legal proceeding to have a person or company adjudged unable to pay obligations.

Garnishment--a court order presented by a creditor to a debtor's employer requiring that part of a debtor's wages be paid to a creditor because payments on a debt are overdue.

Default--failure to meet the terms of an agreement.

Collateral--something of value pledged as security for a loan.

Debt adjuster--a person or organization that takes a large portion of a debtor's income and divides it among his or her creditors according to terms of an agreement between adjuster, creditors, and debtor.

Suggested Learning Experiences

Visit a local court that handles bankruptcy cases or creditors' suits.

Investigate state laws on garnishment of wages.

Using a case study of a family in debt, develop a plan(s) for resolving the problem.

Students form a values continuum

under no circumstance _____
will I go into debt
beyond my ability to
pay _____
Debt is apt
to be a
necessary
solution

Visit a finance counselor (money management expert) and ask him/her what sort of plans they have worked out for people with money management problems. Also, ask them how they became interested in this field.

Taxonomy

2.61 (cont.)

Delinquent--a failure to meet some obligation--particularly a failure to pay a debt.

Lien--a legal claim against property for payment of some debt or obligation.

Unpaid balance--amount left over after you pay a part of total bill.

Finance charge--a certain percent of the unpaid balance is charged to you (similar to carrying charge).

Attachment of property--a creditor may obtain a court order whereby, if a debt is unpaid the borrower's property may be sold.

2.62 Warning signs that too much credit is being used

- More than 15-20% of take-home pay is going for credit payments (not including house payments).
- You are paying bills late.
- You are asking for more time to pay back loans.
- You are getting new loans to pay off old loans.

2.63 Ways financial difficulties can be handled.

- Analyze own problem--go to creditor(s) and explain financial difficulties. List assets and debts. Ask for extension of time but be prepared to pay extra interest.
- Develop a payment plan.
- Know how to handle bill collectors.
- Make reduced payments--regularly pay what you can afford.
- Obtain financial counseling from:
Universities and colleges, Consumer Credit Counseling Services, Credit Bureaus, Credit-Granting Merchants, Credit Unions, Banks, Family

Suggested Learning Experiences

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Guest speaker from Rhode Island Consumers' Council.

Role play running away from a bad debt resulting in a bad credit rating.

Taxonomy

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Suggested Learning Experiences

2.63 (cont.)

Service Agencies, Labor Unions. (Fetterman & Jordan. 1976. pp. 202-204)

- In Rhode Island help may be obtained from the Rhode Island Consumers' Council.
- Bankruptcy only as a last resort.

2.64 Values are inherent in attitudes toward debt. One student may view bankruptcy as a right while another will never accept this method as a solution. The term default will hold very different connotations for different people.

3. CONSUMER LAW/PROTECTION

Goal: Increasing the students' understanding and knowledge of their role as consumers especially the legal rights and responsibilities that insure the bargaining power of all parties.

Specific ObjectivePerformance IndicatorsLevelSuggested Evaluation

3.1 The student will be able to understand the basic elements of a contract: offer, acceptance and consideration and mutual agreement.

3.11 Define contract and list legally binding parts.

Knowledge

Short answer quiz

3.12 Name 3 kinds of contracts and describe the conditions to question or determine.

Abilities

Problem solving

3.13 When provided with a difficult to understand contract, definitions are requested and an accurate interpretation is made.

Abilities
Values

Analysis of a contract with time and opportunity for students to question terms.

Taxonomy

3.11 A contract is an agreement between two or more people that is enforceable by law. Binding parts are:

- Parties involved must agree on all the terms.
- Something of value must be exchanged.
- The parties making the agreement must be competent.
- The purpose of the contract must be lawful.

3.12 Leases (apartment)--legally binding contract between you and a landlord.

- What services does the rent include?
- Is there a damage deposit?
- Who is responsible for repairs and maintenance?
- Is a security deposit required?
- Is there a late-payment charge?
- How do you terminate the lease?
- Can you sublet?
- When can the landlord or his employees enter your apartment?
- Is the landlord responsible for damage to your personal property?
- Should you get rent insurance?
- Can you have pets?

Retail credit agreements--covered by Truth-in-Lending Law.

- Creditor must tell you the dollar cost of the credit (finance charge).
- You must be told the annual percentage rate.
- You must be given a copy of the agreement you sign.
- You should understand when the contract is binding and what happens if you miss a payment.

Mortgage Loans--a loan with real property as security. The rights and obligations are set forth in the Purchase Contract (agreement to purchase)--a legal document binding you and the seller for a

Suggested Learning Experiences

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Collect samples of contracts--mortgages, leases, retail installment, insurance, etc. What are some things that are apt to cause trouble?

Students enter into agreements with each other. Write contracts which will cover each agreement.

List the terms that should be agreed on when signing a lease to rent an apartment.

Debate the competence of carefully described parties. (Intoxicated and insane persons are not considered competent. Many minors are not considered competent and therefore parents may be asked to countersign the contract).

Give examples of three different kinds of contracts that students, family and/or friends have entered in within last week and show how the essential elements of a contract were present.

What is a "Gentleman's Agreement"? Is it legally binding?

Explain the need for written contracts. Give some historical background on why written contracts became necessary. What were the first things most often committed to a written contract?

Pretend you are renting a house or apartment to a couple (either married or not) and you want to make up your own lease. How would you do it? What would be your standards? Who would you consult for help?

Taxonomy

limited length of time to the agreed price and stating exactly what is included in the price.

- Cancellation clause needed should you be unable to obtain financing.
- Provision that "earnest money" (payment of money showing seriousness of intention to buy) be applied against the down payment.
- Clause providing for refund of earnest money and prohibits any charges against buyer if sale does not go through.
- Papers from seller proving he/she has legal title and no liens against property.
- Provision for prorating payment of taxes.
- Identification of all movable items that are part of sale.
- List of repairs or work to be completed before take possession.
- Who pays for appraisal and/or inspection visits.
- Specific day and place to close sale.

3.13 Examples of contracts may be obtained from banks, insurance agents, real estate agents, department stores, etc. to solve their questions or objections.

Suggested Learning Experiences

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- Find out about "Magic Mortgages", FHA mortgages, Farmer's Loan Mortgages, Conventional Mortgages, Assumed Mortgages, etc. Compare or contrast the validity and practical usefulness as it applies to various types of couples - low income, middle, high.
- Find out the exact (if possible) cost of buying a house by adding up:
 1. closing costs
 2. termite inspection costs
 3. "points" added on a mortgage
 4. lawyer's fees for title search

These are many "hidden" costs unknown to consumers. More exist beyond this list. Search them out and come up with a total.

- Students each read a contract as if they were about to sign it. List questions and objections and describe what they would do.

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
3.2 The student will understand the need for social controls, e.g., warranties and consumer laws, relative to consumer credit, deceptive trade practices, truth-in-lending and debt collections.	3.21 Identify six laws that protect and serve consumers.	Knowledge	Objective test
	3.22 Choose consumer protection laws which are appropriate to specific problems	Abilities	Problem solving
	3.23 Clarify the differences in a society with consumer laws and one without such laws.	Values	Debate

Taxonomy

3.21 Some Consumer Laws

Credit:

Truth in Lending Law
 Fair Credit Reporting Act
 Equal Credit Opportunity Act
 Fair Debt Collection Practices Act

Food:

Fair Packaging and Labeling Act
 Wholesome Meat Act
 Wholesome Poultry Act
 Food Additives Amendment
 Nutritional Labeling Regulations

Clothing:

Wheeler-Lea Act
 Wool Products Labeling Act
 Fur Products Labeling Act
 Flammable Fabrics Act
 Textile Fiber Products Identification Act
 Trade Regulation Rule

Health:

Occupational Safety and Health Act
 Poison Prevention Packaging Act
 Federal Hazardous Substances Act
 Noise Control Act
 Cosmetic Labeling Ruling

Housing:

Home Mortgage Disclosure
 Real Estate Settlement Procedure Act

Other:

Magnuson-Moss Warranty FTC Improvement Act
 Privacy Act
 Auto Recall Repair Law
 Energy Policy and Conservation Act

3.22 Laws are applicable to specific situations. It is necessary to study each law and verify whether it covers a particular situation.

Suggested Learning Experiences

Using library resources and classroom references students locate and report on laws.

Using teacher made or student made problems, students determine laws which would be effective in each instance.

Role play: mail order fraud, flim flam, fly-by-night contractors, contract fraud, medical quackery, etc. Stress need for ability to recognize fraudulent schemes. (Contact R.I. Consumer Council for booklet).

Pick 5 of the most obscure Consumer Laws and make up case studies to explain their existence.

Trace how one mistake or tragedy sometimes precipitates a Federal Law. For example, one child wears pajamas which catch on fire due to some highly flammable fiber used to manufacture the piece of clothing. Parents take the matter to court...Do consumers really have much to say about what should be part of their protection by government regulation.

Investigate the ramifications of the Truth-in-Lending Law. What is its purpose? What necessitated it? How can/should it be changed?

Choose any of the following. Explain it and find out the circumstances of the inception of the law:

1897 - Tea Importation Act
 1906 - Original Food and Drug Act
 1912 - Sherley Amendment
 1923 - Filled Milk Act

Taxonomy

3.23 Consumer laws protect the consumer within limits. A debatable point is the extent to which the consumer wishes to be protected. For instance one can question whether everyone should be protected from injury within a car or is it the right of the individual to choose whether he/she might be injured (seat belts and other protective devices).

Also consider the impact (emotional/social/cost) of persons severely injured or killed in a car crash. How can one measure the loss to society of a talented surgeon, an artist, a mother, etc. How are costs borne by society when someone needs institutional care or very expensive health services due to an accident?

Suggested Learning Experiences

- 1938 - Federal Food, Drug and Cosmetic Act
- 1945 - FDC Act (amended)
- 1951 - Supreme Court Decision on "imitation" foods
- 1954 - Miller Pesticides Amendment
- 1960 - Federal Hazardous Substances Labeling Act
- 1965 - Drug Abuse Control Amendments
- 1966 - Fair Packaging and Labeling Act (Sampson, Mortenson, Marienhoff).
1975. p. 130.)

What about consumers who do not smoke being protected against the ill effects of those who do? Should and can the government ban smoking in public? What would be the social, psychological and emotional impact of a rule such as this? Also, how would the general economy be affected? Would restaurants, bars, and other places of social activity lose business? Speculate on this.

Using the government pamphlet, "Warranties: There Ought to be a Law", study the Magnuson-Moss Warranty Act and decide whether you have a right to return a product you are dissatisfied with.

Debate: "All motorcyclists should be required to wear helmets."
or: "Cigarette ads should be banned from magazines."

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
3.3 The student will become acquainted with agencies of protection from fraudulent consumer schemes.	3.31 Identify ten government agencies which help to protect the consumer.	Knowledge	Objective quiz
	3.32 Identify four other agencies which help to protect the consumer.	Knowledge	Objective quiz
	3.33 Describe five agencies available to the consumer, giving function and responsibilities and indicate which agency to request help from for different types of consumer problems.	Abilities	Problem solving test in which consumer problems are noted and the student identifies the appropriate agency to contact.
	3.34 Given an example of a restriction provided by the government on a consumer product, give two arguments for having the restriction and two arguments for not having the restriction.	Values	Analytic paper

Taxonomy

3.31 Same federal government agencies which help protect the consumer:

- Dept. of Agriculture
Office of Communication
- Dept. of Commerce
Consumer Affairs Division
- Dept. of Health and Human Services
Office of Consumer Affairs
- Dept. of Housing and Urban Development

Suggested Learning Experiences

Contest on names of Federal Agencies.

Place a question box in a classroom. Suggest questions be submitted concerning government agencies which help consumers. Supply answers.

Work in pairs to investigate government agencies, their backgrounds, reasons for formation, aims, functions, responsibilities, and

Taxonomy

3.31 (cont.)

- Division of Consumer Complaints
- Dept. of the Treasury
 - Special Assistant to the Secretary for Consumer Affairs
- Civil Aeronautics Board
 - Office of the Consumer Advocate
- Consumer Product Safety Commission
 - Director of Communications
- Federal Reserve Board
 - Office of Safety and Consumer Affairs
- Federal Trade Commission
 - Bureau of Consumer Protection
- Federal Energy Administration
 - Office of Consumer Affairs
- Interstate Commerce Commission
 - Public and Consumer Information Office
- Securities and Exchange Commission
 - Office of Consumer Affairs
- Food and Drug Administration
 - Office of Consumer Inquiries
- Federal Home Loan Bank Board
 - Office of Housing and Urban Affairs
- Environmental Protection Agency
 - Public Information Center
- Dept. of Transportation
 - Office of Public and Consumer Affairs
- Social Security Administration
 - Division of Public Inquiries
- U.S. Postal Service
 - Washington, D.C.

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Suggested Learning Experiences

publications. Provide information on a master chart.

Use chart (and other sources) to determine which agency is responsible for (a)meat and poultry sold in interstate commerce, (b)counterfeit money (c)gas used for heating or cooking (d)unfair competition (e)impure cosmetics (f)illegal issuing of stocks and bonds (g)deceptive advertising.

Check a grocery store to see what inspections are made before the food is received.

List the things done during the first two hours of morning which were affected by government services.

Examples: radio (Federal Communications Commission), weather forecast (Weather Bureau), clothing (Bureau of Standards) (Federal Trade Commission), Make-up (Food and Drug Administration) Food labeling (Fair Packaging and Labeling Act), bus (Interstate Commerce Commission), electricity and gas (Federal Power Commission), advertisement on radio (Federal Trade Commission).

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Taxonomy

3.31 (cont.)

Assistance at the state level (varies from state to state):

- State Attorneys General
- State Departments of Insurance
- State bureaus of weights and measures
- Dept. of Business Regulation
- State Consumer's Council
- Better Business Bureau

Many towns and cities have agencies which help the consumer.

3.32 Some other agencies offering protection to the consumer:

- American Council on Consumer Interests
University of Missouri
- Association of Home Appliance Manufacturers
Chicago, Ill.
- Consumer Federation of America
Washington, D.C.
- Consumers Union of the United States
Mount Vernon, N.Y.
- Cooperative League of the USA
Washington, D.C.
- Credit Union National Association, Inc.
Madison, Wisconsin
- National Consumers League
Washington, D.C.
- Auto Consumer Action Program
(AUTOCAP S), Washington, D.C.
- Furniture Industry Consumer Action Panel
(FICAP) High Point, N.C.
- Major Appliance Consumer Action Panel
(MACAP) Chicago, IL.
- Consumer Research
Washington, N.J.

Suggested Learning Experiences

Make another list of ten items that are not sold under the provisions of the fair-trade laws. List selling prices for each item. Make comparison with another store.

Set up an agency which would provide information on services available to consumers.

Talk to a quality control inspector in the following types of businesses.

- meat packing plant (or a slaughterhouse if you can find one)
- fish packing plant
- produce farmer
- auto industry
- any machinery shop
- any drug company

Get their job specifications, what they look for, how they train their workers, what training they had in college (if college at all), salary, how they got to be doing what they do, skills necessary, etc.

Taxonomy

3.33 Because of space, each consumer agency cannot be discussed here. It is suggested that the Consumer's Resource Handbook be obtained from the Consumer Information Center, Dept. 532 G., Pueblo, Colorado 81009.

3.34 Most government agencies have expanded vastly since formation. Some agencies cover large areas, some have produced findings and made regulations which have been questioned. It is wise to become acquainted with each agency and form a personal opinion concerning effectiveness.

It should also be understood that regulatory agencies are preoccupied with settling conflicting claims among rival groups of producers. These private pressure groups are well organized, highly disciplined in the art of exerting influence, and omnipresent when decisions are being made. Consumers are apt to be considerably more scattered and unorganized.

Suggested Learning Experiences

Explain the role of services provided by, cause and need for, and effectiveness of some government protective consumer agencies.

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
3.4 The student will become acquainted with consumer remedies for contract and tort problems.	3.41 List three examples where agreements are voidable.	Knowledge	List of examples
	3.42 Cite remedies for four breaches of agreements.	Abilities	Objective questions
	3.43 When given the details of a breach of agreement, explain in writing the action which would (actually) be taken.	Values	Essay

Taxonomy

3.41 Voidable agreements

- If there has been misrepresentation or concealment of vital facts.
- If an agreement has been made as the result of threat or use of violence.
- If there has been undue and unfair influence and pressure so that one person did not reach agreement through free exercise of his or her own judgment.
- If the agreement was contrary to law.
- In a contract where one of the parties is a minor.
- A contract which combines both written and oral agreements, only the written is enforceable.

3.42 Breach of warranty consumer actions:

- May cancel contract and refuse to receive goods, or if merchandise has been delivered, can return to seller and demand return of purchase price.
- Keep merchandise and sue seller for damages.
- Claim a deduction from original purchase price.
- Ask Better Business Bureau or Attorney General's Office to mediate dispute.
- Contact manufacturer's district representative (especially in case of autos.)

Remedies when seller fails to perform:

- Ask a consumer agency to help solve the problem.
- Sue for possession of goods, for the recovery of the value that has been fair, or for damages when seller wrongfully refuses to deliver goods.
- Sue for damages if title has not passed.

Suggested Learning Experiences

Students and/or teacher develop examples of sales situations. Entire class determine when the buyer has accepted the goods which have been offered. For each situation determine whether and when the offer can be terminated and whether and when the goods can be refused.

Investigate the situations under which a minor can be held to a contract.

Develop blank contracts or contracts with blank spaces. Pass around class and ask for signatures. Discuss whether the contract is voidable.

Court cases are reported in local newspapers. Search for cases involving contracts and try to discover the real cause of controversy. Analyze the cases in light of the parts of a written contract.

Contact the State Attorney's General Office to discover what assistance is available to consumers.

Investigate the effectiveness of the Better Business Bureau. What is its main purpose? What exactly happens when one appeals to it? Do they have any legal effectiveness?

Small Claims Court is a place where consumers seek redress. What are the rules and regulations of it? Investigate it completely.

Taxonomy

3.42 (cont.)

- Sue for specific performance to fulfill a contract.
- If the seller has broken or failed to carry out seller's part of the agreement, the buyer may cancel the contract and refuse to accept goods.

Sales made at consumer's home:

- If purchase is more than \$25 the consumer has 3 days to set aside the contract.

Unordered merchandise:

- Need not pay for or return.

When minors are involved:

- Often are not competent to contract and may not be required by law to carry out agreement. Exceptions are when contracting for necessities. The adult is required to fulfill the contract if it is legal but the minor can usually rescind (cancel) the contract.

3.43

Consumer rights by law, and what an individual will actually do when there are consumer problems varies according to the values (as well as consumer education) of the individual. It is important for each person to study his/her own actions and determine whether they are living up to their responsibilities in view of their values.

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Suggested Learning Experiences

What protection do people have who issue contracts to minors? What course of action, if any, is open to them? Is there a time limit involved? Is there an enforceable penalty on the minor? What conditions have to be present for a minor to break a contract without any penalties?

Invite the head of the district Attorney General Office to speak to the class on typical consumer complaints in this area.

Visit the District Court when the Small Claims Court is in session.

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BANKING SKILLS: (CHECKING AND SAVINGS ACCOUNTS)

Goal: Understanding the role of banking and lending institutions as the bridge between savers and borrowers, those paying and those saving money.

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
4.1 The student will identify the differences between savings and lending agencies and the various services provided by each.	4.11 Define the following kinds of financial institutions: • Commercial banks • Mutual savings banks • Savings and Loan Associations • Credit Unions	Knowledge	Completion questions
	4.12 Describe the services performed by each of the financial institutions named in 4.11.	Abilities	Objective test
	4.13 Identify the kinds of services and conveniences desired in financial institutions under varied conditions.		
	4.14 Briefly outline the history of banking.	Knowledge	Essay

Taxonomy

4.11 Definitions:

- Commercial banks-- owned by stockholders and may be chartered by the federal government and is a member of the Federal Reserve System. Offers a wide variety of services. May be thought of as the department stores of finance.

Suggested Learning Experiences

Investigate different types of financial institutions in the area. Compare safety features, services, interest rates and withdrawal privileges. Illustrate on a chart.

Investigate:

Which type of bank today is actually faring

Taxonomy

4.11 (cont.)

- Mutual savings banks (chartered only in 18 states - mostly in Northeast)--most are owned by stockholders. Have fewer services than commercial banks. These institutions were originally developed to serve individuals and families rather than businesses..
- Savings and Loan Associations--may also be called "building and loan associations" or "cooperative banks". These are specialized financial institutions licensed by the federal government or state. Very specialized services.
- Credit Unions--a nonprofit organization in which each depositor is a shareholder.
- Trust companies--a bank authorized by the state as trustees. An institution may function only as a trust company, however many banks also serve as trustees.

4.12 Services performed:

- Commercial banks
 - checking accounts
 - savings accounts
 - credit-card services
 - savings certificates
 - cashier's and traveler's checks
 - sale and redemption of government and savings bonds
 - safe-deposit boxes
 - loans and mortgages to businesses, farmers and individuals
 - trust services

Suggested Learning Experiences

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the best? This is an in-depth assignment and may take a longer period of time than originally anticipated.

Compare: Interest Rates on Mortgages
Interest Rates on Savings
(all types of savings with stipulations)
Interest Rates on Loans
(all types)

Checking Account Interest Rates
Christmas Club Interest Rates
Many banks have their financial records disclosed (by law) and you may need to have this information translated for you. There are many other aspects which you could delve into.

Make conclusions based on your information to answer the original question (underlined above).

Exactly what happens to cause a bank to become closed by proclamation. What safety checks exist today to guarantee that deposits and loan paybacks will always be sufficient to cover a bank's operating expenses? Could it happen again? What effect does it have on the middle class worker - how about the high finance businessman? What exactly is the effectiveness of the FDIC? Is there an option to join? If your bank is not a member what would this mean if it "went under" and you had \$20,000 in the bank? What safeguards does it provide?

TaxonomySuggested Learning Experiences

4.12 (cont.)

- Savings Banks (most important services)
 - savings accounts
 - longer term savings deposits (two years or more)
 - mortgage loans
- Savings and Loan Associations (most important services)
 - savings accounts, technically the purchase of savings shares
 - home mortgage loans
- Credit Unions
 - savings accounts
 - low-cost personal loans to members
 - mortgage loans
 - share draft accounts
- Trust companies
 - operate trust funds
 - manage real estate
 - administrator or executor of estates

4.13 Commercial banks offer convenience in that checking and savings accounts can be in the same institution. Allowance is made for automatic transfer of funds from checking accounts to savings accounts and for automatic payroll savings plans. The bank can require advance notice of withdrawal of funds. Provides bank credit cards, loan accounts. Insured by F.D.I.C.

Mutual Savings banks are apt to have a higher rate of interest paid on savings than commercial banks. Funds can ordinarily be withdrawn without notice.

Taxonomy

4.13 (cont.)

Savings and Loan Associations have interest rates dependent on overall earnings and the earnings may vary from one association to another and from time to time. The bank can require advance notice of withdrawal of funds. For the saving of money, these are as convenient as commercial banks, though there are fewer of them and they may lack some of the commercial banks services. Currently can pay 1/4 % more on passbook savings accounts than commercial banks.

Credit Unions are one of the fastest growing savings institutions in the nation. The original purpose was to help wage earners whose money needs (savings and borrowing) were not being met by other financial institutions. There are good returns on savings, low-cost loans and sympathetic service. The total annual dividend rate on any account cannot top the percentage set by law (7% in federally chartered--higher in some state chartered).

4.14 Before 13th century

- Money-changers and bankers viewed much the same
- Loans by temples of Babylon in 2000 B.C.
- Banking by traders by 6th century B.C.
- Roman law recognized payment of debt and public notaries appointed in 2nd century A.D.

14th to 18th century

- Local banks for centers of warehouse trade
- Ambulatory bankers at international fairs
- International financiers concerned with finance of international wool trade, papal revenues and loans to kings and princes
- Holograph documents (written by principal)

Suggested Learning Experiences

Taxonomy

4.14(cont.)

- Check-like document rare before 1500
- Negotiability evolved gradually from 16th to 18th century
- Rapid progress in development of banking
- First American bank granted charter in 1781 (Bank of North America)
- 28 state banks by 1800
- 1863, National Bank Act causing a new national unity
- 1913, Federal Reserve Act marking change from local, decentralized one
- 1921-1933, depression years bringing about bank failures
- March 6, 1933, nation wide closure of banks by proclamation, causing establishment of Federal Deposit Insurance Corporation; to insure deposits in all member banks of federal reserve system and in nonmembers which qualified
- 1980, legislation to deregulate ceilings on savings in banks and savings and loan institutions

Suggested Learning Experiences

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<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Language Skills</u>	<u>Suggested Evaluation*</u>
4.3 The student will learn how to select a bank or savings and lending institution.	4.31 Define: Liquidity FDIC insurance FSLIC insurance National Credit Union Administration insurance	Knowledge	Completion questions
	4.32 Describe two economic functions of a bank.	Abilities	Listing

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Specific Objective

Performance Indicators

Language Skills

Suggested Evaluation*

4.33 Give four questions to be answered before a financial institution is chosen.

Abilities

Listing

4.34 When presented with a financial situation, select the appropriate kind of financial institutions and develop an inquiry sheet to use in making a final selection from among the institutions.

Values

Paper

Taxonomy

4.31 Definitions:

- Liquidity--The ease or speed with which an investor can get his/her cash.
- FDIC--Federal Deposit Insurance Corporation. Insurer of depositors in member banks to a maximum of \$100,000. Over 90% of all banks are insured by FDIC.
- FSLIC--Federal Savings and Loan Insurance Association. Insurer of savings and loan associations up to \$40,000 covers federally chartered credit unions. State chartered credit unions may join the insurance plan if they meet necessary qualifications.
- NCUA--National Credit Union Association. Insurer for Credit Unions

Suggested Learning Experiences

Where would you keep emergency money?

Should money be put in Safety Deposit Boxes?
Why?

Investigate automated teller machines which provide 24 hour service. Find out consumer rights and responsibilities in using these machines (liability for loss/theft of card is limited by law - but consumer must report loss promptly in order to be protected).

Collect advertisements from newspaper to compare yields at different financial institutions.

What, historically, has been the limit on savings? For example, was it always \$100,000?

TaxonomySuggested Learning Experiences

4.32 Banks serve an important economic function by granting loans to businesses and by clearing checks.

- Business function. Stockholders, businesses and other institutions deposit their money in banks. This money is then available for lending and investing, thus helping those who need the money for personal or business purposes.
- Check-clearing function. When a customer's bank collects for another bank on which a check is drawn. The process is called "clearing". Since this costs 25¢/check many banks are offering "check saver" accounts where they do not return cancelled checks to the depositor. You can get a copy of a check from their microfilm files if necessary.

4.33 Questions to answer about financial institutions:

- What kind of financial institution is it? (This helps to identify services.)
- Does the institution insure deposits?
- What rate of interest does the institution pay? How is the interest figured?
- What is the minimum amount that will still draw interest?
- Is money in the account available at any time? (liquidity)
- How convenient is the institution to home and/ or work?
- How helpful are the people in the bank?
- Are any incentives (like gifts) offered to entice you to bank there?

Make up a chart with the questions in 4.33 along the side. Along the top list the banks within a 5 mile radius of your home. Get answers according to your needs and wants. The chart may also be used with case studies.

TaxonomySuggested Learning Experiences

4.33 (cont.)

- Is its physical structure attractive?
- Is it near other stores or services which you use? (eliminates car travel to other places)

4.34 An inquiry sheet, used to evaluate financial institutions, is helpful when the personal needs are included as part of the evaluation.

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
4.4 The student will know the mechanics and responsibilities of maintaining a checking account.	4.41 Define: <ul style="list-style-type: none"> • Personal checks • Cancelled checks • Endorsement in blank • Special endorsement • Restrictive endorsement • Certified check • Joint account • NOW account • Service charge • Free checking • Statement • Overdraft • Stop payment order 	Knowledge	Short answer
	4.42 Give three reasons for using a checking account.	Knowledge	Short answer
	4.43 Illustrate how to write a check and record in the check register.	Abilities	Fill in areas indicated on an illustration of a check.
	4.44 Reconcile a bank statement when provided with an illustration of a bank statement, cancelled checks and a check register.	Abilities	Reconcile statement

Taxonomy

4.41 Definitions:

- Personal checks--a form furnished by the bank to pay a stated amount to a person or company from the funds of the depositor.
- Cancelled checks--the bank has paid the check.
- Endorsement in blank--check signed with only the name of the payee. The check is then payable to the holder.
- Special endorsement--check is signed over to another person by writing "pay to the order of . . ."
- Restrictive endorsement--instructions are written "for deposit only" above the signature.
- Certified check--the bank takes the amount of the check out of your account, then stamps the check indicating that they guarantee the money to pay the check is available.
- Joint account--two people use the same checking account during the life of both parties.
- NOW account--a savings account from which money can be withdrawn with a form similar to a check.
- Service charge--a small price to pay for the bank's service in keeping track of your paid checks.
- Free checking--no service charge applied if you maintain a minimum balance.

Suggested Learning Experiences

Is there an advantage(s) to a joint checking account? Disadvantage(s)?

What are some instances when a record of payment is advantageous?

Find out the requirements (minimum daily balance and average daily balance) for NOW accounts. What are the penalties for failure to maintain minimums? What interest is paid? Is a NOW account a good idea for the average person? for you?

Taxonomy

4.41 (cont.)

- Statement--list of the number and amount of all the checks you wrote during that month, service charges, deposits, overdrafts, and balance.
- Overdraft--writing out checks greater than the balance in your account.
- Stop payment order--the bank, at your special emergency request, will not pay on a check you have written.

4.42 Reasons for using a checking account.

- Provides a record of payment and therefore is a receipt.
- Often more economical to pay bills through mail than to make a trip to the places where accounts are to be paid.
- Register provides record of expenditures, deposits, and bank balances.
- Money in checking account is safe from theft or loss.
- Serves as a reference.

4.43 Examples of check forms may be obtained at various and financial institutions.

4.44

Suggested Learning Experiences

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Compare advantages and disadvantages of using automated teller machines.

Given a particular banking or bill paying situation, write the correct endorsement to be used.

Fill out a check in the proper manner, and enter correct information on check stub or register.

Given a sample checkbook and register, along with a list of instructions, make out 5 checks and 1 deposit slip (according to instructions) and fill in register or stubs.

Given a bank statement based on the above exercise, reconcile your register with bank statement.

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<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
4.5 The student will know how to develop a sound savings plan.	4.51 Describe: <ul style="list-style-type: none"> • Savings accounts • Time deposits • Certificates of deposit • U.S. Government savings bonds • U.S. treasury bills • Credit Union savings account 	Knowledge	Short answer quiz
	4.52 List four factors to consider when choosing a form of investment.	Abilities	Listing
	4.53 When presented with a problem situation concerned with an individual or family wishing to establish a savings plan, determine the kind of savings felt to be most suitable and describe why the choice was made.	Values	Problem solving

Taxonomy

4.51 Definitions:

- Savings account--can usually be opened with a small amount of money and withdrawals can usually be made easily and conveniently. Interest rates vary but are usually lower than on other accounts.
- Time deposit--savings that, in principle, cannot be turned into cash until a specified amount of time has passed. Good temporary investment, but low rate of return.

Suggested Learning Experiences

Which has the most influence on savings, (1) personal characteristics or (2) amount of income.

Debate: "Every family should have a savings account."

Do a table of interest rates.

Set up a resource file of information on ways to save available in the local community.

Taxonomy

4.51 (cont.)

- Certificates of deposits--larger amounts of deposits are usually required and the money must be left in the bank for longer periods. Rate of interest is usually higher.
- U.S. treasury bills--short term obligations of the federal government. Good interest rates.
- Credit Union savings account--savings by members made in the form of share purchases. Savings may be made in quite small amounts, and used toward purchase of shares.
- U.S. government savings bonds--Government bonds which may be purchased and redeemed at most banks. Series EE can be bought in amounts of \$50 to \$10,000 and pay interest on maturity. Series HH bonds are sold in amounts of from \$500 to \$10,000 and pay interest twice a year. Interest is slightly higher than regular savings accounts.

4.52 Factors to consider when choosing an investment:

- Safety of principal--degree you are assured of getting back the amount originally invested.
- Liquidity--speed and ease with which you can cash in.
- Yield--interest and cash dividends.
- Capital gain potential--a bank account does not fluctuate in price from day to day; securities do.
- Conveniences--some investments take considerable investigation and supervision.

Suggested Learning Experiences

Draw up a proposal for a "Truth in Savings" law. What information should be provided to consumers before they open a savings account?

Evaluate advertisements for savings - do they meet your criteria?

Given a series of case studies, decide which type of savings plan would be most appropriate for the individual case.

Taxonomy

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4.53 The choice of where investment should be made is based on personal value judgments (safety vs. risk and convenience especially) as well as income to be made.

Suggested Learning Experiences

Develop a savings plan for your own personal use.

5. COMPARISON SHOPPING FOR GOODS AND SERVICES

Goal: Developing the skills, understandings and techniques of sound shopping habits for goods and services.

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
5.1 The student will be able to differentiate between impulse buying and comparison shopping	5.11 Define impulse buying and comparison shopping.	Knowledge	Short answer quiz
	5.12 Relate the steps in responsible decision making to the purchase of goods.	Knowledge	Listing
	5.13 Describe the basic needs of people and how those needs influence the manner in which individuals may approach the purchasing of goods.	Abilities	Problem solving
	5.14 Predict the effect of emotional moods on purchasing decisions.	Abilities	Completion test
	5.15 Identify own personal values and describe own buying habits.	Values	Paper in which student is asked to solve specific individual buying problems which involve values in making choices.

Note: Useful workbook type materials for this component are available in "Strategies for Teaching Economics: Basic Business and Education," Joint Council on Economic Education and in Herbst, Mueser, Handel, Real Life Consumer Economics. 1980.

Taxonomy

5.11 Definitions

- Impulse Buying--purchase on the spur of the moment without reference to any plan or search.
- Comparison shopping--purchase is made only after analyses of need and comparisons of quality and cost in relation to need.

5.12 Steps in decision making

- Define problem
- Determine alternatives
- Seek information
- Weigh alternative choices
- Determine best choice or determine not to buy the product or service
- Reevaluate selection

5.13 Maslow states that man has a pressure within him to press toward a fuller and fuller being. This means pressing toward what most people would call good values, toward serenity, kindness, courage, knowledge, honesty, love, unselfishness, and goodness. Categories of needs are identified which are placed in hierarchy, which is an arrangement of stages or steps, each higher than the preceding one.

Higher	Aesthetic Self-actualization Esteem Love and belonging Safety Physiological
Lower	

Suggested Learning Experiences

Present Maslow's "Hierarchy of Needs" to show basic needs of people.

Working in small groups list 5 purchases which have been made. Analyze motivations:

1. Physical well-being	9. Future money-saver
a. appetite	10. Boredom and Compulsion
b. comfort and rest	11. Psychological uplift
c. exercise	
d. self-preservation	
2. Creativity	
3. Recognition	
4. Knowledge	
5. Beauty and Fashion	
6. Recreation	
7. Financial gain	
8. Convenience	

Observe shopping practices in a store and report on findings. An observation chart would be useful. Interview friends about shopping practices.

Using the outcome of the shopping practice experience, develop a description of how decisions are reached.

Make study of own impulse buying habits and report them. Hold a forum on personal causes that help motivate impulse buying.

Observe sex differences in impulse buying. Talk to both men and women and find out (af-

Taxonomy

5.13(cont.)

Maslow believed that one would not be seeking to self-actualize (realize highest potentials) while living in hunger or fear. In other words, lower needs must be met before higher ones can come into play. (Maslow, 1954) (Maslow, 1959)

5.14 Emotional moods which affect shopping negatively are:

Periods of stress	Time limits
End of crises	External influences
Personal - loneliness	

5.15 As needs are met, one may still expect that a new discontent and restlessness will soon develop. This is a reaching toward self-actualization.

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Suggested Learning Experiences

ter they have shopped) who has or has not stuck to a list and who usually veers from it

Think about the last time you were hungry, tired, cold, hot, thirsty to an extreme. Could you concentrate on fulfilling your "spiritual" needs or were you too preoccupied with fulfilling your basic needs? For example if you are ravenously hungry in a market, do you stop and think about shopping comparatively, unit pricing, sales, etc.? Think of seven examples where this has happened to you. (Your physiological state affects your reasoning power in spending.)

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
5.3 The student will be able to identify the different methods used by producers and retailers to alert them to comparative value, e.g., unit pricing, labeling, advertising, store brands, sales, etc.	5.31 Identify four marketing techniques which influence consumers.	Knowledge	Listing
	5.32 List four sources of information about a given product.	Knowledge	Listing
	5.33 Describe the credibility of four sources of information about products.	Abilities	Objective test
	5.34 Identify own reaction to four marketing techniques which have been experienced.	Values	Paper

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Taxonomy

5.31 In order to stay in business, a seller must:

- Produce a usable product or service
- Distribute the product to potential consumers
- Price the product so that consumers will be able to buy it.
- Promote the product so that consumers will want to buy it.

Promotion communicates the features and consequences of products to the consumer through:

- Advertising
- Brand names
- Sales people
- Unit pricing
- Labeling
- Sales and price reductions
- Product specification sheets
- Special displays
- Unusual packaging
- Free merchandise
- Stamps
- Coupons
- Contests
- Premiums
- Discounts

5.32 Types of information are:

- Experience and intuition
- Word of mouth
- Mass-media advertising
- Mass-media articles
- Trade publications
- Government publications and scholarly papers
- Standards and labels
- Non profit consumer organization information
- Friends and family

Suggested Learning Experiences

Develop a master list of consumer information sources for selected items which can be duplicated and made available to others.

Keep records of information obtained from sales people. Test for accuracy.

Collect examples of promotional devices that stimulate consumers to buy. Analyze & discuss. Note prizes, premiums, trading stamps, coupons, contests, discounts, special introductory offers, sales (one-cent, anniversary, inventory) price reductions, referral sales, special displays, unusual packaging, and labeling, free merchandise, and others. Make posters for bulletin board display.

Look for information on wear, care, and use of items in catalogue descriptions. How does information compare with information one can receive in a store?

List the products advertised in a magazine and indicate whether there is any seal, label, certified test, or testimonial to indicate the standard or quality of the product.

Investigate people's perceptions of the Good Housekeeping seal of approval and then conduct research to find out what it actually represents.

Taxonomy

5.33 Sources of prepurchase information represent great risks for consumers. A good rule to remember is "The closer to the profit (seller), the less credible the information." For instance the sellers of Mighty Mac washing machines will profit more from the information contained in their advertisements than the sellers of Consumers Reports will from analyzing washing machines.

Some helpful hints in deciding on credibility are:

- Experience and intuition. Many good judgments are results of practice and feed-back, however, it is well to remember to put a larger trust in large samples.
- Word-of-mouth from a professional consultant can be quite helpful. Other word-of-mouth communications may not be credible. This is true among industries as well as among persons.
- Mass-media advertising. The range of credibility for advertising seldom exceeds semi-credible. Sellers are not going to present any information that can downgrade their products or services.
- Trade publications. These are written for people who are doing a particular job. The information is useful if one remembers the publications are supported by advertisements of the suppliers to a craft and have a range of credibility. Seldom extend beyond the semi-credible rating.
- Scholarly papers. These come from consumer advocates, public interest research and academic research. Credibility is dependent on the writer.

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Suggested Learning Experiences

Review information provided in a recent issue of Consumer Reports, Consumer Research or Changing Times.

Select one item about which there has been conflicting information and research from as many sources of information as possible. Be sure to include "word-of-mouth". Possibilities for research are contact lenses, vitamin pills, and cosmetics.

- Do this over a period of time; don't just go by the most recent copy. Note how the item was reviewed years ago. Also, note changes in brands in terms of quality.
- Find an item (such as a double-edged razor blade) which is now basically extinct. Follow its history to the newer, disposable ones. Do this for 5 items.

Bring empty boxes to class and study how eye appeal can draw attention to products. Get "wise" to display techniques, ex. supermarket layouts.

Compare the types of information given on one particular product, such as a GM car, as given in Consumer Reports, a trade publication, and a regular magazine advertisement.

Bring to class some food labels. What other kinds of information do they contain, besides that required by the Fair Packaging and Labeling Act?

Compare nutritional labels.

Taxonomy

5.33(cont.)

- Non-profit consumer organization information. An example is Consumer Reports which runs laboratory tests and has no advertising.
- Government publications. These are under local, regional state or federal direction and are designed to inform the public or industry about products and services. These are generally credible sources of information.
- Standards and labels. Due to government regulations, the information on labels that is required by law will almost always be credible, while information not required by law may be less credible. The Fair Packaging and Labeling Act of 1966 regulates labels in four major areas.
 1. Net quantity of contents in terms of weight, measure or numerical count must be given.
 2. Commodity must be identified.
 3. Name of manufacturer or distributor's address must be shown.
 4. Label should not contain qualifying terms which may distort content information.

5.34 Because people differ in temperament and values, reactions to marketing techniques will differ. Each individual should analyze their own reactions.

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Suggested Learning Experiences

List 5 items you have bought in the past month and explain why you bought that particular brand (analyze the marketing techniques which influenced you.)

Survey supermarkets and "health food" stores to observe which foods (and candies, soda, etc., are labeled "natural". Investigate the meaning of the term. Do a price comparison.

Specific Objective

5.4 The student will identify the different types of retail outlets available for consumers.

Performance Indicators

- 5.41 Identify the types of stores available to the consumer and give the characteristics of
- 5.42 Identify the type of retail

Level

Knowledge

Suggested Evaluation

Objective questions

Abilities

Provide buying situa-

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Specific Objective

5.4 (cont.)

Performance IndicatorsLevelSuggested Evaluation

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establishment which provides the best goods and/or services for each consumer need.

5.43 Discriminate among kinds of retail outlets for personal use.

Values

tions which require the student to identify the appropriate

Rank order with reason.

Taxonomy

5.41 Types of Retail Outlets:

- Department store
- Chain store
- Discount store
- Door-to-door salesman
- Speciality shop
- Cooperatives
- Variety store
- Wholesale stores
- Catalogue showrooms
- Manufacturers' outlets
- Vending machines

Characteristics affecting choice

- Location
- Layout
- Atmosphere

Services and policies affecting choice:

- Cash and carry
- Charge accounts
- Installment purchasing
- Check cashing
- Parking
- Gift wrapping and mailing
- Mail or phone orders
- Delivery
- Extra shopping hours

Suggested Learning Experiences

Small groups of students investigate available outlets in the community and report back to class. Develop a list of questions to ask about each, e.g., comparison of services, prices, layouts, etc.

Read pp. 22-25 in Your Shopping Dollar by Household Finance Corp. Classify shopping facilities.

Visit various kinds of shopping facilities. Using check sheet, select 2 or 3 items that each store stocks and secure prices and other pertinent information. Discuss advantages and disadvantages. Provide information for another class.

Suggested field trip: provide students with a list of 30 specific grocery items (include brand name and size.) Divide into groups and visit 3 or 4 markets in town. Have students gather data and then make posters to compare:

- prices at 3 main supermarkets
- supermarket vs. convenience stores
- brand names vs. store brands
- brand names vs. generic brands

Taxonomy

5.41 (cont.)

- Lounges, restrooms, nurseries
- In-store restaurant and post office
- Strollers, wheel chairs, umbrellas
- Return and exchange privileges
- Layaways
- Fashion shows and informal setting
- Expert advice
- Bridal registry

5.42 Factors affecting choice of outlet

- Income
- Health
- Age
- Personal values
- Time
- Life style
- Transportation
- Distance to be traveled

5.43 It is necessary to understand one's values as well as to know the availability of outlets and their services in order to make intelligent decisions.

Suggested Learning Experiences

- unit price of small vs. large sizes
- services provided by each market

Rank in order (from highest to lowest) the factors which would affect your choice of an outlet.

Is it cost effective to drive farther to get lower prices? Would it be more cost effective to shop close to home even if prices are higher? (Need to figure cost of operating car which is more than cost of gas and oil. These figures are published each year by the government, Hertz and other sources).

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
5.5 The student will apply the techniques of comparative shopping when selecting services, e.g., insurance, health services, credit, recreation, etc.	5.51 List 10 services which are used regularly.	Knowledge	Listing
	5.52 Describe, in steps, how one shops for a service.	Abilities	Listing
	5.53 Given the need, one service will be chosen in view of own values and needs (e.g., making funeral arrangements).	Values	Essay

Taxonomy

5.51 Some services

- Professional--doctors, dentists, lawyers, accountants.
- Personal--dry cleaners, beauty shops, laundries, barber shops, employment agencies, family portraits, mail-order sales, marriage counseling, funerals.
- Household help--yard care, household help, child care.
- Repair services--appliances, equipment, cars, TV sets.
- Financial--banking, credit, insurance and investments.
- Institutional--postal service, judicial system, welfare services, city services (garbage collection, snow removal, street repair, fire and police protection).
- Education--elementary, secondary, college, private business, vocational, correspondence.

5.52 Shopping for Services

- Learn about the service. Don't attempt to shop from ignorance.
- Once informed, write down a list of "buying tips" or "questions to ask".
- Compare two or three places that offer the same service.
- Make an informed decision based on values and needs keeping in mind both rational and emotional motives.

5.53 Descriptions of many services can be found in the library. Students should become acquainted with those services which are most likely to be used and evaluate their own attitudes toward shopping for each service. For instance, will they continue to go to the family doctor without question, or will

Suggested Learning Experiences

Investigate health care services available to people of different ages, different incomes and in different localities. Compare.

Make a list of all the services the family has purchased during past six months.

List one service with which your family is sufficiently pleased to use over and over. Describe the service in terms of guides one could use to select such a service.

Describe an unpleasant and unsatisfactory situation involving the use of a service. How can each be avoided?

Lawyers, banks, accountants, optometrists, dry cleaners, beauty shops, and many other service-oriented providers have taken to advertising their prices and corresponding services in papers and magazines, etc. How do you feel about this - especially lawyers, optometrists and other white collar professionals? Is this beneficial to them and to the public? Call a few of these and get more details. Is the price stated accurate? Do you know anyone who has "shopped this way"? Were the results positive?

Devise a list of questions to ask when shopping for a doctor or a dentist. (Check Consumer Union's Guide to Consumer Services.)

Role playing situation: phone or visit doctor/dentist to ask these questions. One person plays consumer, others play receptionist and doctor or dentist. (Since these profes-

Taxonomy

5.53 (cont.)

they make a systematic search for a doctor of their own choice?

Suggested Learning Experiences

sionals are not used to questions and comparative shopping they (or receptionist) may be hostile and reluctant/evasive in answering.) Interview a lawyer/doctor to find out how they would recommend searching for a professional in their field.

6. ADVERTISING AND OUR SOCIETY

Goal: The student will be able to recognize and discriminate between informational advertising, selling aids, and motivators which meet the needs, wants and interests of the consumer.

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
6.1 Students will gain an understanding of the purposes and techniques of advertising.	6.11 Identify the functions of advertising, for both business and the consumer.	Knowledge	Listing
	6.12 List six advertising techniques.	Knowledge	Listing
	6.13 List three positive aspects of advertising and three negative aspects.	Knowledge	Listing
	6.14 List two examples of deceptive advertising.	Knowledge	Listing
	6.15 Distinguish between advertising which is effective for the consumer and that which is not.	Abilities	Using actual ads, distinguish between those that are useful and those which are not.

Specific Objective

6.1 (cont.)

Performance Indicators

6.16 Evaluate own use of advertising as a source of making decisions about purchases.

Level

Values

Suggested Evaluation

Probing questions

6.17 (History) Discuss briefly the history of advertising including the origin, kind during middle ages, change of definition, beginnings in America, 19th century shifts in media and advertising research.

Knowledge

Essay

Taxonomy

6.11 Functions of advertising (business):

- Persuasion to buy a product
- Financial support for mass media
- Public service

Functions of advertising (consumer):

- Provide information--sources, price, functions

6.12 Advertising techniques:

- Emotional appeal for the product.

These are directed toward the consumer's pride, vanity, desire for status or desire to keep up with his neighbor. "Snob appeal".

- Logical reasons are given for preference of the product over other brands. Emphasis is placed on special ingredients, performance, and unique qualities. "Facts and figures".

- Endorsements of products by celebrities tend to cause consumers to identify themselves with famous people. "Testimonial".

Suggested Learning Experiences

Collect ads of different sales. Analyze reason for the promotion.

Check to see how many examples of advertising are encountered in a day.

Play tapes of radio or T.V. commercials; analyze the appeal each made.

Each student select an ad which has appeal to the public and analyze the type of appeal.

Develop a check list for ads including information such as:

Is the information adequate?

Is the ad factual?

What technique is used?

Use the checklist with a number of ads.

Find the "best" ad. Defend choice in class.

Taxonomy

6.12 (cont.)

- "Everybody" using a product is used to meet the basic drive of belonging. "Bandwagon".
- A funny commercial will be remembered. "Humor"
- Down to earth, regular person, plain talking kind of appeal. "Plain folks."
- Combination of words and scientific sounding words which are meant to impress. "Word magic."
- Famous people use the product. "Identification."
- An unfair comparison or "set up" is used to make the product look better than competing brands. "Cardstacking."
- A pleasant feeling is associated with the use of the product. "Suggestion technique."

6.13 Positive aspects of advertising:

- Advertising can be educational in that it alerts the public to new products.
- Advertising is a form of communication which has often helped to improve individual well-being.
- Advertising can lead to better merchandising at lower prices. Competition to provide the best product at the lowest price.
- If it were not for advertising, the cost of newspapers and other publications cost would be beyond the reach of most people.

Suggested Learning Experiences

Write a commercial and act it out using a special advertising technique.

Poster Project: Each student select a particular technique and find 3 or more examples of this technique in magazine ads. Make a poster to display the ads and analyze the technique.

Advertising substantiation. Each student select an example of media (T.V., radio) advertising that makes a claim or implies a benefit without providing sufficient data.

Write to the chief officer (check Standard & Poor's Directory in library) to request substantiation. Discuss responses (or lack of response) in class.

How do politicians "advertise" their policies? What gimmicks, if any, do they use? Find a speech (either contemporary or historical) and analyze it as to its "advertising."

Clip from magazines and newspapers ten advertisements that you believe perform a useful function in informing the public about the current market.

What was the first TV commercial? Trace the development of commercials on TV, radio, newspapers, magazines or any type of media from its inception. Give several examples of "old-type" commercials from TV, radio, magazines, etc.

Taxonomy

6.13 (cont.)

- In many instances advertising provides help to the consumer (e.g., gardening, care of tools, etc.) and public service (e.g., preservation of environment).
- Advertising helps to maintain high standards in that products acquire reputations which leads to public acceptance.

Negative values of advertising:

- Misleading descriptions such as "twice as much" and "your money will be cheerfully refunded" misrepresent products.
- Advertising often appeals to subconscious needs, desires and ambitions and thus controls feelings of guilt, fears, loneliness, doubts and insecurity.
- Advertisers portray all phases of life in glowing terms. Products are set in luxurious settings in an attempt to make the consumer discontented with what he/she owns.

6.14 Deceptive advertising

- Bait and switch. A product is advertised at a very low price but no mention is made that there are few of such items or that they are stored in a warehouse elsewhere. The customer is then shown another higher priced item.
- Fictitious pricing. The "manufacturer's suggested price" is overstated to make a sale price seem good.
- Misrepresentation. False or exaggerated claims are made about the quality and performance of a product.

Suggested Learning Experiences

Note Ben Franklin's role in advertising. Why was he called the Father of Advertising in America?

Students discuss situations in which they or their families have been victims of deceptive advertising.

Develop a list of probing questions to be used in evaluating ads.

Ask a representative of the state consumer's council or Attorneys General Office to provide examples of "bait and switch."

Taxonomy

Suggested Learning Experiences

6.14 (cont.)

- Unordered products are sent through the mail followed by a letter demanding payment. (These need not be paid for or sent back.)

Procedures for making complaints about advertising may be found at the end of this section.

6.15 Persuasion may replace impartial evaluation because success for the advertiser is dependent on sales. Much of what is written is apt to be useless to the consumer. The question arises of how much information should be expected. It is the consumer who ultimately pays the costs of the advertising.

6.16 The extent to which advertising is capable of altering the buying habits of the consumer is deeply related to the values of the consumer.

6.17 History

- In ancient times, town criers sold such items as slaves, cattle and imports.
- Movable type invented in 1450--ushered in era of advertising.
- First announcement of availability of goods appeared in The Tattler in 1700.
- Many regard Benjamin Franklin as the Father of Advertising in America.
- In 19th century improved transportation made distribution easier and by 1870 the use of magazines for general advertising was established.
- During first two decades of 20th century, regulations came from both within the industry and from the government.
- After World War I was era of salesmanship and advertising accepted as an essential tool.
- During 20's radio was added.

Taxonomy

6.17 (cont.)

- During depression of 30's blamed as playing part in nation's troubles.
- Consumerism caused advertising research to be developed. (Nielson, Gallup)
- After World War II advertising expenditures soared and TV was added.

Suggested Learning Experiences

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
6.2 Students will be able to identify consumer needs, wants and interests based on values.	6.21 Describe the difference between "knowledge" and "values". 6.22 Explain the interaction among needs, values and resources. 6.23 Discuss how own values affect consumer choices.	Knowledge Abilities Values	Definitions Problem solving Essay

Taxonomy

6.21 Definitions:

Knowledge--"Recall of specific and isolable bits of information" (Bloom. 1956. p. 62-98).

- Knowledge of specifics
- Knowledge of ways and means of dealing with specifics
- Knowledge of the universals and abstractions in a field.

Values--"Values are the beliefs, feelings and ideas we have about things. Our values are related to all aspects of our lives--social, political, religious, economic and aesthetic, and have probably been most influenced by family beliefs and

Suggested Learning Experiences

Take the Forced Choice Value Test (Adaptation by Teaching Topics from Institute of Life Insurance and Health Institute, Vol 19, no. 2, Spring 1970.

View instant slides (prepared by teacher or gifted students, see resource section for instructions) to identify ways in which use of money reflects one's values.

Take a survey to determine why individuals buy a certain brand of selected products. Vary the sample according to age, sex, race, income, education, etc. Care should be taken

Taxonomy

6.21 (cont.)

the culture in which we live. Values are also molded by institutions such as churches, schools and social organizations.

6.22 See 5.11 for description of Maslow's hierarchy of needs.

Values give direction to our choices but value conflicts are apt to result as needs and resources are considered. For instance one may value clean, unpolluted air; need to have transportation to a job and have no transportation available except a car.

Resources which are available to us to reach our goals are limited and therefore our choices are limited. We must be aware of both physical and human resources.

6.23 "Everything we do, every decision we make and course of action we take, is based on our consciously or unconsciously held beliefs, attitudes and values."

Suggested Learning Experiences

in designing a survey sheet which will allow for ease of tabulation.

Use Rank Order questions such as appear in Simon, Sidney, Leland Howe and Howard Kirschbaum. Values Clarification, p. 58.

Watch a T.V. show. Evaluate the values portrayed by different characters.

Keep a record of money expenditures for a week. How does the spending reflect values? Make a chart:

Expenditures	Values
1.	1a.
	b.
2.	2a.
	b.

Specific ObjectivePerformance IndicatorsLevelSuggested Evaluation

6.3 Students will be able to recognize and categorize emotional appeals in advertising.

6.31 Define emotional appeal

Knowledge

Short answer quiz

6.32 Explain the term "rational ads", determining the real difference between them.

Abilities

Written explanation (or oral)

6.33 Analyze effects "emotional" ads have had on self.

Values

Reaction to five ads

Taxonomy

6.31 Emotional advertising is usually termed as that which provides no facts but instead stresses the feelings produced by use of the product.

6.32 One might better label some advertising as irrational (as opposed to rational) instead of emotional. Advertising can be rational (supply basic facts and information) and yet have some emotional appeal. Instead of thinking of all emotional ads as being useless, one might better think of "irrational" appeals as being useless. Those ads which associate a product with something which has no real connection with it.

6.33 It is unlikely that the effect of ads will be fully comprehended unless a close look is taken at personal attitudes. For instance, is Maxwell House Coffee chosen because "Without it, apple pie just wouldn't be the same", a Thunderbird T-Roof convertible desired to "Come fly with me..." or is Kroger chosen because "Over a million shoppers... can't be wrong"?

Suggested Learning Experiences

Bring in a selection of ads, and watch T.V. ads to analyze for emotionalism and then analyze again for irrational claims. Discuss.

Make a list of emotional words (soft, cool, vibrant, natural, etc.) found in verbal and written ads.

List everything purchased during week days (or some suitable time) and analyze to determine whether emotionalism in some ad caused the purchase.

How would buying habits among consumers change if all advertising had only logical appeals?

Collect samples of advertising that depict various techniques of persuasion - identification, social approval, fear of disaster, etc. Pick out the "persuasive" tool or words or phrases used to sell the product. Analyze each ad on the basis of effectiveness and what type of person it might appeal to.

Many ads today are sex-oriented. "Be more of a woman so he'll be more of a man." Masculinity and femininity are stressed constantly. Find 20 examples of this and choose the phrases, body postures, or any other clues in the ad that stir up feelings of masculine/feminine sexuality. What feelings (if any) of sexual inadequacy does this elicit from the general public.

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
6.4 Students will be able to identify and classify motivational techniques in advertising.	6.41 List two facts the advertiser will question about the consumer in relation to the product to be advertised.	Knowledge	Listing
	6.42 List six media used by advertisers	Knowledge	Listing
	6.43 Given one ad from each of three media, determine the motivational technique(s) used and identify the questions (in 6.41) with which the advertiser was probably most concerned.	Abilities	Responses to ads selected from different media.
	6.44 Identify one purchase made as a result of advertising. Analyze the reason(s).	Values	Written paper

Taxonomy

6.41 Advertisers' questions

- What attitudes do people have toward this type of product?
- What psychological needs or desires does the product satisfy? Among the most commonly psychological wants featured in advertisements are: sex, food and drink, comfort, freedom from fear and danger, desire to be superior, social approval, long life and love of family.
- What are the buying habits of people who buy this type of product?

Suggested Learning Experiences

Discussions: Do we face a tomorrow (or today) where advertising is the master and not the servant of the people?

Debate: "The consumer can be taught to prefer any product a marketing firm chooses to offer."

Who bears the responsibility for honest and informative advertising?

In terms of advertising, does private enterprise have a "social responsibility" to society?

Taxonomy

6.42 Media used by advertisers

- Television
- Radio
- Printed page (newspapers, magazines, brochures and leaflets)
- Promotion giveaways
- Door-to-door salesmen
- Yellow pages of phone book
- Catalogues
- Contests
- Packaging
- Bill boards

6.43 The first purpose of advertising is to get the readers or listener's attention and hold it. The ad should then arouse the desire of the consumer for the product or service, and finally get him/her to buy it or at least to recognize it. Besides choosing motivational thrust and the media, the advertiser can create the message so as to leave different implications with the consumer, e.g., A crowded layout suggests to most people that the product or store whose name appears is a bargain-type product. Conversely, a great deal of space suggests style and sophistication.

6.44 Most consumers are influenced by some aspects of advertising. An understanding of this influence will help one to evaluate some purchasing practices.

Suggested Learning Experiences

Why is self regulation of advertising claims almost a complete failure?

Is mass advertising as effective as it has been in the past? Provide reasons for answers.

What effect does advertising have on children? Consider closely, advertising done on Saturday morning and holidays such as Christmastime.

Conduct a survey of the consumer goods advertised during "prime time" and compare the major networks. Evaluate which consumer group-children, adolescents, adults, housewives-is being influenced. Why and how is it done? Is it effective?

Use the list in 6.42 (Media used by advertisers) and list the media in order of importance, in terms of influencing consumer purchases in their age bracket. Contrast and compare their choices with others. What does the list tell you about your values?

Each student evaluate own purchase decisions as related to the influence of advertising.

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
6.6 Students will be able to identify informational sources of advertising: ex. classified ads, periodicals, educational materials from business, industry, and professional organizations.	6.61 List four sources of useful informational advertising. 6.62 Provided with problems to solve (e.g., obtain a job), locate the best sources of information and describe how each can be used.	Knowledge Abilities and Values	Listing Problem solving

Taxonomy

6.61 Informational advertising sources

- Catalogues from out of town supply houses (seeds, tools, etc.)
- Classified ads in newspapers and magazines
- Yellow pages in the telephone directory
- Help wanted listings in employment agencies
- Educational materials from businesses, industry and professional organizations.
- Government publications

6.62 Materials not immediately available in newspapers, telephone directories, etc. may be requested from the business or organization in which there is interest. Many addresses may be obtained from the local library. (Standard and Poor's Index of Business Corporations)

Values play a key role in how much a consumer will use informational advertising. For instance some people are so incensed by mass mailings of catalogues from various businesses that they refuse to order through the mail. Some will use the yellow pages of the telephone directory and make calls while others would prefer to make personal contacts

Suggested Learning Experiences

Two teams compete to see who can name the most sources of informational advertising.

Bring catalogues, classified ads, etc., to class and study to discover the amount of information given.

Find out how much money all media spend on advertising in one year. Separate the major types of media who advertise (TV, radio, magazines, etc.) and break it down into categories. Then, find out the cost of 30-second or 1 minute commercials on TV-depending on what time of day it is and whether it's a local or national network. Be thorough!

What is the impact of advertising on society? Are we becoming "puppets" whose choices are being controlled by master minds who create within us their ideas of our needs and wants? If so, what can we do to combat this manipulation of our "selves"? If not, give reasons why you choose to buy certain products over others-without sounding like a commercial

Taxonomy

6.62 (cont.)

and obtain information in a more personal way.

Suggested Learning Experiences

yourself. Ask others their opinions on this, too.

Practice looking up the following in the yellow pages: a) Attorney General Office (b) nearest Post Office (c) nearest nursery, etc.

Students explain what sources of information they would use to: a) find a job b) choose a doctor c) find help in solving a legal problem d) make a complaint to a manufacturer, etc.

RESPONSIBLE BUDGETING

Goal: Developing the ability and concept of personal budgeting to satisfy the wants and needs of groups and individuals.

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
7.1 The student will understand the value of the budgeting process.	7.11 Define "budget" 7.12 Give three reasons why budgeting is effective in providing for both the present and the future.	Knowledge Abilities	Short answer Problem solving
	7.13 Give one reason, based on fact, why a budget (or a better budget) would improve own personal well being.	Values	Essay

Taxonomy

7.11 Definition for money management (budgeting).
 "Money management means using a systematic method of planning for spending, based on the expected income of the individual or family unit, and founded on a favorable attitude toward the use of effective buying knowledge and practice. (Garman, 1978. p.359)

"A budget is a financial tool, and like any tool, if properly used, it can help the individual achieve certain goals which might otherwise be beyond his reach." (Unger and Wolfe, 1973. p. 32)

7.12

- Financial planning does not increase the income, but it is used to systematically determine the most effective way to spend the income that the family expects to earn.
- Helps to improve the family's material level of living.
- Helps to remove family stress which has in some cases led to divorce or suicide.
- Helps family to avoid financial difficulties.
- Helps to reach short range and long range goals.
- Instrumental in providing records for income taxes, as well as other records.
- One of best deterrents to impulse buying.
- Forced to place each expenditure in proper focus. Have prepared a priority list.
- Random purchasing patterns without planning can seriously decrease your money's power.
- Helps us to acquire an understanding of economic principles as they apply to everyday living. Money is the medium of exchange whereby we use the money we receive as producers to obtain goods and services we require as consumers.

Suggested Learning Experiences

An opinion poll to discover students' attitudes toward money management. Draw from the results a firm definition of money management (budgeting).

Case studies (newspaper items can be useful and Money magazine has a case study each month) to bring out family budgeting problems and examples of inadequate management of money. Include instances of changes in family size and comparisons of needs when different ages are reached by parents and/or children. Because living as a single person has become customary, this situation should be included.

Complete charts for families of different sizes and financial and social circumstances:

- Assess families' present financial status
- Estimate families' hopes in 1 year, 5, 10, 25 years; retirement
- Develop a plan for achieving such goals

Panel discussion to define "live within your income."

Taxonomy

7.13 Every spending decision one makes is "the opportunity cost of spending". If one purchase is made, then the opportunity to make another purchase is deferred or given up. The decisions one makes when money is spent, determines an entire way of life. Budgeting forces one to realize that there are limited resources for a great many wants.

Suggested Learning Experiences

Use "Point" (a family budget is worth while)-"Counterpoint" (a family budget takes more time than it's worth).

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
7.2 The student will understand the inter-relationships among budgeting of time, energy and money.	7.21 Define time, energy and money as they relate to the consumer.	Knowledge	Short answer
	7.22 Describe two situations in which consumer activity is adjusted because of time or energy or money.	Abilities	Essay questions
	7.23 Using two problem situations, and own resources of time, energy and money, solve the problems to meet own needs and wants.	Values	Problem solving

Taxonomy

7.21 "Time" refers to the time one has available when all necessary activities are taken into account.
 "Energy" refers to the capacity of the individual to perform an activity in terms of health and well-being.
 "Money" refers to finance available and the values inherent in the use of the money.

Suggested Learning Experiences

Ask students to suggest situations where there seems to be limited choices. List the situation, including alternative solutions. Add additional alternatives for each situation and discuss whether or not each alternative would have been open to the person involved and at what cost. (Contact J.C. Penny for audio-visual materials.)

Use case studies to discuss various factors

Taxonomy

7.22 The use of time, energy and money are both inter-related and dependent on the individuals values. Some considerations may be:

- Personal background
- Present circumstances
- Personal likes and dislikes
- Life style
- Goals
- Resources available
- Resources needed to accomplish goals.

7.23 Personal values in the use of time, energy and money should be recognized. What is practical and desirable for one person is not necessarily desirable for another.

Suggested Learning Experiences

in planning and evaluating budget situations such as:

- Additional working hours
- Catastrophic emergencies
- Change in health
- Added family responsibilities

Working in groups students will review the same case study in which a decision must be made concerning time, energy and/or money. After a length of time, each group should list the alternatives which were available and the implications of each. Compare.

Record as many activities as possible which are performed in one day.

Categorize: things which you must do, things you should do, things you could put off.

Assess a money value next to some of the activities to see if (1) some one else can do it more inexpensively (2) you could do it yourself more efficiently.

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
7.3 The student will identify the steps involved in constructing a personal budget.	7.31 Define: dollar value fixed income external influences self-indulgence opportunity costs disposable income (net) gross income variable expenses present financial condition long term goals	Knowledge	Short answer

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
7.3 (cont.)	revolving expenses fixed expenditures		

7.32 Describe the budget process listing the necessary steps.

7.33 Identify short and long term goals, keep track of expenses, set up sample budget, try out the budget and then refine.

Abilities Listing question

Values Sample budget completed, trial and refined.

Taxonomy

7.31 Dollar value--the dollar is influenced by inflation (getting less for one's money) and deflation (getting more for one's money).

Fixed income--an income such as retirement checks which remain more or less unchanged.

External influences--influences such as advertising, family pressures, religious ties, societal demands, ethnic background, type of neighborhood and occupation.

Self Indulgence--the movement of an item from "would like" to "need".

Opportunity costs--if resources (primarily labor or capital) are used to satisfy one human want (clothing, food, housing) they cannot be used to satisfy another human want (medical costs, recreation).

Disposable income (net)--amount of income after federal and state income taxes, Social Security tax

Suggested Learning Experiences

List kinds of income other than wages and salary and explain the differences.

Keep a record of every expenditure for a week. Analyze in terms of "musts" and "luxuries."

Debate: If you have very little money there is no reason for budgeting.

Discuss: "Savings should be fixed payments."

Using budget figures from the U.S. Dept. of Labor (obtain from Government Office) make up a hypothetical family situation for different sized and salaried families. Make up a case study for 3 different types of families and insert a calamity which will really upset the families' budgets. Figure a way they will have to come up with \$1,000 to cover the unexpected emergency.

Taxonomy

7.31 (cont.)

payments, retirement fund contributions, insurance, credit union, and other such deductions have been taken out of the income.

Gross income--money you get from all sources of income.

Variable expenses--those expenses which are variable and can be controlled.

Present financial condition (net worth)--what is left when family's liabilities (what is owed) are subtracted from its assets (what is owned). It is a balance.

Long term goals--those goals which the family hopes to attain some time after the next five years.

Revolving expenses--expenses which are irregular but paid regularly such as insurance payments, tuition and taxes.

Fixed expenditures--fixed amounts occurring on a regular basis such as rent and auto payments.

7.32 Developing a plan

1. Determine goals, both short and long range.
2. Estimate income from all sources and then determine net income (amount left after taxes, etc.). Also consider other nonmonetary family resources (recreation through arts and crafts, free library, free parks; community programs for self improvement, etc.)
3. Plan expenditures, both fixed and variable. Determine spending patterns.

Suggested Learning Experiences

Compare and contrast lower, middle, and upper class incomes. Do a comparison/contrast of the three classes in terms of values, health, leisure time, money earned, money spent, type of work done, upward or downward social mobility, etc.

Get the newspapers from various communities and investigate the leisure time activities you see (there will be at least 30-40!) and start a list that goes from free leisure time activities (don't forget gasoline!) to activities which go to \$100 a person.

Take a sample budget that you have devised for a family of four in which the income is \$24,000 a year. Considering all "normal" expenses (using photostated sheet) how long would it take to pay for a vacation for all 4 of them to go to the Bahamas for 5 days. If you do this systematically, you should do their budget for a few years--don't forget "appreciation". A brochure describing prices of the Bahamas today won't be the same as one in 5-7 years. Take that into consideration.

Study the Quarterly Report or Annual Report of a business corporation. What items are included under "assets"? "liabilities"?

Study the latest proposed federal budget. What are the main sources of revenue? The biggest expenditures? What items have priority? What programs have to be sacrificed in order to achieve priorities?

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
7.4 The student will understand the mechanics of setting up a record keeping system.	7.41 List the expense items which should appear in a budget. 7.42 Develop a budget worksheet. 7.43 Keep a record on the budget worksheet for a period of time and then make appropriate adjustments to the sheet for its improvement.	Knowledge Abilities Values	Listing Develop work sheet Keep record and make adjustments

Taxonomy

7.41 Expense Items:

- Food--that purchased for home and that eaten away from home.
- Housing--(a) rent or mortgage payments (b) utilities (c) heating (d) property taxes (e) repairs and maintenance (f) all household insurance--fire theft, liability and mortgage.
- Clothing--new, repairs, cleaning, laundry.
- Transportation--public and/or own automobile, gas, oil, insurance, license, tolls, repairs, maintenance.
- House Furnishings--appliances, furniture, draperies, linens, credit payments, rugs, repairs and maintenance.
- Medical--medicine and drugs, medical and dental expenses, hospitalization and health insurance.
- Insurance--life, and any other special insurance.

Suggested Learning Experiences

Each student develop a list (over a period of time) of those items that should be budgeted. Form a master list. Consolidate.

Ask credit unions, banks and savings and loan associations in community whether they make available budget forms for individuals or families to use. If such forms are available ask for them for class use.

Develop some "Rules of Thumb" for record keeping.

What is the U.S. Department of Agriculture's market basket? What does it attempt to show?

Develop a budget for self for a one week period, assuming at least \$30.00 income from a part-time job.

TaxonomySuggested Learning Experiences

7.41 (cont.)

- Recreation--entertainment, vacations, sports, clubs and costs associated with them.
- Contributions--charitable and religious, etc.
- Personal--allowances for all incidentals.
- Savings--banks, stocks, bonds, mutual funds, credit union shares.
- Miscellaneous--gifts, books, magazines, hobbies newspapers, dues and fees.

7.42 The form of a budget is not important, as long as it is workable and allows for flexible planning and record keeping. Suggestions for forms may be found in many books on Consumerism or Economics. Forms may also be obtained from banks and other savings institutions. Some people prefer a more detailed budget whereas others operate with just a few categories.

7.43 Some principles to help in developing records:

- The budget does not have to include every penny to succeed. It shouldn't be a maze of trivia--nor a strait jacket.
- Don't limit self to functioning within the narrow range of cited percentages.
- It is probably a good idea to plan a budget period equal to the period between income receipts.
- Fixed items of expenditure must be provided for first.

Taxonomy

7.43 (cont.)

- Big expense items and other "must" items must be spread so each income period shares.
- A big expense cannot necessarily be cut just because it is large (e.g., food).
- A budget should help to develop a set of priorities with respect to general items of expenditure, but it need not consist of a detailed set of accounts indicating where every penny is spent.

Suggested Learning Experiences

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
7.5 The student will be aware of the need for flexible budgeting due to changes in the economy, personal life style and family.	7.51 Define "priority". 7.52 When given a problem situation in which there may be a priority change, list the factors which may cause a change in priorities. 7.53 Using the same problem presented in 7.52, select the priority which should be first choice and explain why that priority is that important.	Knowledge Abilities Values	Short answer quiz Problem solving Problem solving

Taxonomy

7.51 Priority--a preferential rating.

7.52 A budget is a guide, not a dictator; it is a reflection of you, your conscience. It need not be a maze of trivia, nor a noose around your neck. Neither should it function within such narrow ranges that it becomes something to avoid. Con-

Suggested Learning Experiences

What effect does change in dollar value have on the budget?

Think of 6 or 7 external influences that most families do not expect to have but often do. How is the budget affected?

Taxonomy

7.52 (cont.)

sequently a budget must be flexible enough to allow for emergencies of a personal nature, changes in the economy, and changes in life style. Priorities will determine the nature of the flexibility.

7.53 Each person will have his/her own priorities. Though every budget should be flexible, the nature of the flexibility will be determined by the individual.

Suggested Learning Experiences

Students tape interviews with people in various stages of the family life cycle to learn their approaches to budgeting. Such persons might include a young married couple, a middle aged couple with children, and a senior citizen.

List a purchase from which you feel you got more than your money's worth. Did your priorities affect how you felt about the purchase? On the other hand, do the same for a purchase that "cost" more than you thought it would. For example, "convenience" (saving in time and energy) often means extravagance in terms of dollars spent. Also, sometimes paying more for an item makes us think it will work easier, faster, etc., but often it is more cheaply made but looks better. List some items for which this is true.

Using the \$30 budget suggested in 7.4, reexamine priorities to determine whether changes are needed.

8. INSURANCE

Goal: Understanding the role of insurance in maintaining personal and family security.

Specific Objective

8.1 The student will understand the underlying principles of insurance.

Performance Indicators

8.11 Define "insurance".

8.12 List three principles underlying the use of insurance.

Level

Knowledge

Abilities

Suggested Evaluation

Definition

Listing

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
8.1 (cont.)	8.13 Develop a statement giving own philosophy concerning the use of insurance.	Values	Written paragraph
	8.14 Write a brief history of insurance.	Knowledge	Paper

Taxonomy

8.11 Insurance--Coverage by contract whereby one party undertakes to indemnify or guarantee another against loss by a specified contingency or peril.

8.12 Principles underlying insurance:

- Responsibility for probable loss is shifted from the individual to a group.
- Provides economic security through a system of periodic payments to an insurance company, who provides protection in return.
- Underlying principle is that if a large enough group participates in a risk-sharing plan the probability of disaster striking a majority or all of those participating at the same time is virtually nonexistent.
- Insurance company has as its goal the achievement of a profit as the reserve reaches the proportion where the risk cannot affect its stability. The reserve is invested to earn more money.

Suggested Learning Experiences

Compare and contrast insurance and gambling.

Name every risk taken during past twenty-four hours.

Explain probability by flipping a coin, two coins, three coins, etc.

Should any insurance be mandatory? What types of insurance are mandatory and why?

Investigate Lloyd's of London as an insurance agency.

Investigate malpractice insurance for doctors (all kinds of doctors!).

TaxonomySuggested Learning Experiences

8.13 Insurance should never be judged as a luxury. It is a necessity particularly where people have dependents or heavy business and professional responsibilities.

8.14 Life insurance had its beginning in the time of ancient Rome where the Roman societies paid for the burial of their members who died. During the Middle Ages, the guilds did essentially the same thing. The early emphasis was Marine insurance when merchants insured ships cargoes and the masters. An insurance office was opened in Philadelphia in 1721. Life insurance appeared in America in 1759. That company, known as the Presbyterian Minister's Fund is still in existence. Today there are almost 1800 insurance companies in the United States.

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
8.2 The student will identify the various types of insurance and define the area of protection each provides.	8.21 Give two types of insurance and list three kinds of protection under each type. 8.22 Explain the kind of protection to be expected under four kinds of insurance policies.	Knowledge	Listing Essay
	8.23 Identify priorities in kinds of insurance to hold under varying circumstances.	Values	Panel discussion

Taxonomy

8.21 Types of insurance:

- Risks to persons: death, accident, sickness, permanent disability, old age and loss of employment.
- Property risks: fire, riot and civil revolt, malicious mischief, vandalism, natural disasters, theft, water damage, mysterious disappearance and marine.

8.22

- Life insurance is protection against economic loss to a person's dependents as a result of death.

- Health insurance is protection against the financial losses due to serious illness or accident.
- Fire insurance is protection against financial loss of home as well as its contents.

- Theft insurance is protection against financial losses due to theft, burglary and robbery.

- The six basic types of automobile insurance are (1) liability for bodily injury (2) liability for property damage (3) comprehensive physical damage (theft, fire, hurricane, other damage not due to any accident) (4) collision (5) medical payments and (6) uninsured motorist.

- Liability insurance is held by home owners, store owners and owners of business enterprises both large and small who are vulnerable to claims and lawsuits.

Suggested Learning Experiences

List risks we are exposed to and distinguish between insurable risks and uninsurable risks.

Working in groups list every kind of insurance you can think of. Which group has the most kinds? Which group can categorize them into types?

Play a value's game such as Forced Choice. Student must choose the most vital insurance from a list, by first choosing ten, then five, then three and finally one. Give reasons for choice. Why doesn't everyone agree?

What new approach has been proposed to compensate persons injured in automobile accidents "regardless of fault"? Why? What states have this? Has it worked? Investigate the legislative goings-on in our R.I. legislature on this.

Against what types of loss might the owner of a house wish to be insured? Would this vary in different parts of the country?

List as many factors as you can that insurance companies may take into consideration before determining what premium rates will be for a car - for a home.

"Insurance is made available in reverse proportion to demand." Explain why this applies to an inner city resident trying to obtain a package policy.

Taxonomy

8.22(cont.)

- Title insurance is insurance against all claims that the previous owner of a property had full and clear title to the property he is offering for sale.

8.23 It isn't possible to insure one's self against every conceivable type of risk. Small losses can be absorbed by the individual. Major risks are the ones that should be covered. Besides the protection against financial loss, insurance engenders security which is important for emotional well-being.

Suggested Learning Experiences

Given that one cannot carry insurance on everything - make forced choices of insurance.

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
8.3 The student will understand how to select the company, type of coverage, and level of coverage.	<p>8.31 List five factors to be considered in the selection of an insurance company.</p> <p>8.32 Describe the compromise necessary in the selection of insurance and provide a list of five of the major risks faced by individuals.</p>	<p>Knowledge</p> <p> Abilities</p>	<p>Listing</p> <p>Short answer quiz</p>

Taxonomy

8.31 Selection of an insurance company:

- Buy from a well established company, fraternal organization, professional or alumni association.
- Buy from a company licensed in own state.
- Get recommendations from friends and relatives.

Suggested Learning Experiences

Check community for insurance companies.

Name every risk taken during the past 24 hours.

Each student ask five adults what insurance they carry and with which company. Class compare.

Taxonomy

8.31 (cont.)

- Shop around, make comparisons.
- Deal with one agent who is trusted.
- Check bank for life insurance. It may be cheaper.
- High promotional and advertising costs add to the total cost of your premium.
- Decide whether to deal directly with an insurance company or whether to go to an insurance agency.

8.32 Most individuals are faced with allocating scarce resources; therefore most of us must be underinsured. One must recognize the risks taken, eliminate as many as possible, and give the remaining ones a priority. The major risks are:

- Loss of income as the result of death or disability of the family head.
- Cost as a result of the death of a wife where children are involved.
- Costs as a result of injury or illness of a family member.
- Damage to property, such as by fire.
- Loss of savings and income through personal liability, such as from automobile accidents.
- Loss of property through theft.

Suggested Learning Experiences

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Read Consumer Reports article on life insurance, auto and homeowners insurance for cost comparisons.

Compare the ease of estimating possible losses. For instance, if car is stolen or destroyed, one can estimate the dollar cost, but it is very hard to set an upper limit on possible loss due to liability in an auto accident.

What state laws do insurance companies have to adhere to? What penalties are incurred if they don't?

How has longer life expectancy (give statistics from 1980 charts for all ages) affected life insurance companies? Why? How do these companies invest their funds? Describe various services they perform?

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
8.4 The student will understand the relationship between changing financial status and the need for insurance coverage.	8.41 Give three conditions on which the amount of insurance coverage is dependent. 8.42 Describe the kind of person who insures. 8.43 Give three major hazards to financial security and the most common kinds of insurance for each.	Knowledge	Listing
		Abilities	Written paragraph Completion test

Taxonomy

8.41 Conditions concerned with insurance coverage:

- Number of dependents
- Age of breadwinner
- Family earning power (now and later)
Consider education, occupation, ability, drive, family connections, luck, age, and geographical residence.

8.42 People with larger incomes, who do not need every cent they earn in order to survive are more likely to invest in insurance.

8.43 Some hazards

• Death.....	<u>Insurance for each</u>
• Life insurance	
• Disability.....	• Partial and total disability policies
• Automobile.....	• Liability, Comprehensive, Collision
• Property harm.....	• Fire, Extended coverage, Personal liability
• Health.....	• Health insurance

Suggested Learning Experiences

Set up individual and family situations and decide on the kind and amount of insurance which might be chosen.

Why is it that those who need insurance the most are the ones who are likely not to have

Insurance companies provide many services:
Investigate some of the following:

1. life insurance
 - a) term life
 - b) straight life
 - c) limited payment life insurance
 - d) endowment life insurance
 - e) group-life insurance
2. annuity plans
3. health (medical) insurance
4. disability income
5. education advertising
6. fire insurance
7. loans
8. investments

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
8.5 The student will develop an understanding of the vocabulary and language of insurance agreements.	8.51 Define five terms used in insurance. 8.52 Interpret three selected phrases in an insurance policy.	Knowledge Abilities	Definitions Interpretation of pertinent policy phrases.

Taxonomy

8.51 Insurance terms

- Policy--A written form provided by the insurance company which tells who is insured, for what amount, and what kind of protection has been purchased.
- Endorsements--Additional forms which extend, restrict, or clarify the basic policy.
- Package policy--A method of combining different types of insurance into one policy.
- Insured--Person insured by the package.
- Insurer--Company issuing the policy.
- Premium--Amount paid periodically for the insurance protection of a given policy.
- Risk--The chance taken by the insurance company that the hazard insured against will actually happen.
- Deductible--The amount the insured pay before the insurance company will pay.

Suggested Learning Experiences

Study actual insurance policies line by line to interpret meaning.

Using insurance statistics:

- how many deaths each year occur at what cost to insurance companies
- why do some companies only insure young, healthy white people
- how many dollars are paid to insurance companies each year as opposed to how much is paid out in claim
- as far as house, car, personal insurance is concerned, what are "average" rates
- what determines differences in rates (age, health, sex, job-danger factor)

Taxonomy

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8.51 (cont.)

- Exclusions--Situations which the insurance company does not agree to cover (e.g., earthquakes, acts of war, predetermined illness, cosmetic surgery, etc.)

8.52 Actual insurance policies should be collected and reviewed. Insurance agents should be helpful in making interpretations.

Suggested Learning Experiences

9. TAXES

Goal: Understanding the consumer's role and responsibilities in the local, state and federal tax structure.

(Note: It is suggested this unit be taught in March and April when federal and local budget proposals are in the news.)

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
9.1 The student will understand the reasons for and types of taxes within each level of government.	9.11 Define: <ul style="list-style-type: none">• Taxes• Indirect taxes• Direct taxes• Proportional taxation• Progressive taxation• Regressive taxation	Knowledge	Definition
	9.12 Give four basic principles underlying a good tax.	Abilities	Essay question
	9.13 Give the taxes collected by federal, state and local governments and briefly describe each.	Abilities	Short answer

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
	9.14 Describe the necessity for taxes and own personal attitude toward the levying of property taxes, income taxes and custom duties.	Values	Essay question
	9.15 Briefly describe the history of taxation.	Knowledge	Panel discussion

Taxonomy

9.11 Taxes are charges, usually of money, imposed by authority upon persons or property for public purposes.

Indirect taxes are those which are paid indirectly, through the purchase of goods and services. This may shift the burden from one group to another.

Direct taxes are those taxes which are paid directly by the person or business to the government. They cannot be shifted.

Proportional taxation involves taxing people according to their ability to pay. Taxpayers pay a fixed percentage of every dollar of income.

Progressive taxation is any income tax or any tax on money inherited. The tax increases according to the increase in income or in the value of the inheritance or gift.

Regressive taxation refers to the fact that such taxes take a higher percentage of income from the poor than they do from the rich. They are the reverse of the progressive taxes. Sales tax is an example.

Suggested Learning Experiences

Discuss "Taxation without representation".

Research history to find instances when taxes have been levied without the full knowledge of the people and have been instrumental in bringing about conflict.

Conduct a contest to see who can name the most progressive and the most regressive taxes.

Provide a "running" list of kinds of taxes on a bulletin board where students may add the kinds of taxes they have discovered.

Describe life without taxes.

Compare and contrast the sales taxes for the states. Why are some taxes very low or non-existent while others may reach 6 or 7%? Do states differ on the items taxed? What or who decides what the taxes shall be and what or who can initiate legislation to change the tax?

Taxonomy

9.11 (cont.)

Intermediate taxes are progressive in some respects and regressive in others.

9.12 A good tax:

- Must be economical to collect.
- Must provide sufficient revenue.
- Should not place too heavy a burden on any one group.
- Should be easily regulated but not too easily evaded.
- Should permit taxpayers to pay their taxes in a fashion that is as painless as possible.
- Should be levied with full knowledge and understanding of all citizens as to purposes and needs.

9.13 Federal taxes:

- The personal federal income tax is constructed to take a proportionate amount of the individual's income. The percentage grows larger as one's income increases.
- Excise taxes are taxes on specific commodities and services originating in this country.
- Customs duties or tariffs are taxes on imported goods.
- The corporate income tax is a tax on the income of corporations. The income of a corporation is composed of the profits from its operations and the earnings of the factors of production such as land and machinery that the corporation owns.

Suggested Learning Experiences

Using charts, diagrams and pie graphs, discuss the differences between direct and indirect taxes, progressive and regressive taxation.

The preamble to the Constitution more or less spells out the federal government's responsibilities to its citizens, one of which is to "lay and collect taxes...to pay debts..."

List all of the areas that our taxes are used to pay these debts. (Example-national defense, veteran's benefits, space research, etc.) Also, put down how much the government collects in taxes and what percent and dollar amount is allocated to each listing you have made.

Lowering taxes is difficult. How might this be done successfully? Has it happened recently? Where? Give background on the process. What have been the effects, positive and negative, on the life style and economy of the areas undergoing the lowering of taxes.

Taxonomy

9.13 (cont.)

State and Local Taxes:

- Property taxes may be based on property alone or may have charges made on other property such as home furnishings, paintings, etc.
- The personal state income tax is likely to be tied to the federal income tax in one way or another.
- Sales Taxes are regressive in that they hurt people with little money more than those with more money. Are likely not to be on staple items such as food, clothing and medicines.
- License fees and entertainment fees include many taxes such as hunting license fees, driver's licenses, etc.
- Estate and inheritance taxes are taxes placed on property to be given to heirs.

9.14 Taxes are the government's weekly pay check and are necessary to furnish revenues for the services we expect from the government. There is a contradiction however. On the one hand we insist that no individual shall be taxed so heavily that this person cannot enjoy the use of what he had earned. On the other hand we believe that every citizen is equal under the law and therefore should receive the same benefits under the government. This means limited resources and unlimited demands.

9.15 The history of taxation is one a change of taxes as a mark of bondage to a badge of freedom.

Suggested Learning Experiences

Why are the costs of government rising rapidly? In what ways are these costs met? Why is it difficult to reduce government spending?

Find out what the federal tax receipts were for the most recent fiscal year by type of tax: Progressive, Intermediate, Regressive.

Taxonomy

9.15 (cont.)

Before 14th century

- Duty of slaves, vassals, peasants, colonists and conquered people to support the ruling classes.

14th to 19th century

- Feudal system gradually broken up
- Patrimonial revenues slowly gave way to taxes.
- Land, as the primary source of wealth became the primary source of taxation.
- Import and export duties and internal excises became important.
- Poll taxes flourished.

19th and 20th century

- Rebellion against arbitrary and oppressive taxation.
- More equity and uniformity in taxation.
- With new forms and differentiated sources of wealth, taxes on incomes and inheritances were adopted.
- Gasoline taxes, retail sales taxes, motor vehicle taxes and net income taxes added.
- Property tax abandoned to the local units.

Suggested Learning Experiences

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Bring in newspaper articles which discuss the federal government's budget plans, including any proposals to raise or lower income taxes.

Find out from an auto dealer who sells foreign cars how much the "tariff" adds to the price of the car.

Bring in newspaper articles which discuss local community decisions to reevaluate property and/or raise the tax rate and/or hold a financial town meeting.

Filmstrip: Taxes, Taxes, Taxes, Parts I, II (N.Y. Times Film Service)

Discusses the problems of cities which face the necessity of providing increased services while confronting the problems of a declining tax base.

The history of taxation is available in a booklet from the Internal Revenue Service.

Specific Objective

Performance Indicators

Level

Suggested Evaluation

9.3 The student will be aware of how tax dollars are used to support various programs.

9.31 Give three reasons for government spending.

Knowledge

Listing

9.32 Give three programs supported by the tax dollar at the federal level, three at the state level and three at the local level.

Knowledge

Listing

9.33 Give three reasons for growth of government spending.

Abilities

Short answer

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
	9.34 Make a summary statement on future government spending (Federal, State and local) giving own feelings and values.	Abilities and Values	Essay or Debate

Taxonomy

9.31 Why governments spend:

- To provide social goods and services. These include highways, sewer lines and police protection--those benefits which can be shared by a number of individuals.
- To encourage beneficial externalities and eliminate adverse ones. This includes city bus lines which may be subsidized because they cannot charge enough to cover their costs and stay in business. Private education may also be subsidized through low-interest government loans and favorable tax treatment.
- To provide transfers of purchasing powers. This includes money given by the government without receiving anything in return. Welfare is included here. The government transfers purchasing power to a recipient.

9.32 Programs supported by the government:

• Federal	
National defense	Agriculture
Veterans' services	Education
Space and Science	Commerce
Health	Highways
Public Welfare	Natural resources

Suggested Learning Experiences

Debate: Resolved: All growth in government spending shall be stopped.

Continued increases in tax rates can sometimes result in lower tax revenues because of consumer reaction. Discuss how this might happen with (a) the property tax, (b) sales tax (c) tax on tobacco (d) tax on alcoholic beverages.

Discuss "Guns and butter" as a phrase suggesting the difficulty of maintaining a large defense establishment while meeting the demands for consumer goods.

Give specific examples for growth of government spending. For example, under "Rising Aspirations", the Elementary and Secondary Educational Act or the Headstart program could be given. Give a brief description of each specific program.

Divide class into two groups: using newspaper articles have one group study local budget proposals and the other group study federal budget proposals.

Taxonomy

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9.32 (cont.)

• <u>Local</u>	
Education	Health, hospitals
Public welfare	Natural resources
Streets, roads	Police, fire
Recreation	
• <u>States</u>	
Education	Health, hospitals
Highway	Natural resources
Public welfare	

9.33 Reasons for growth of government spending:

- National defense. War and the threat of war.
- New products. One example is the mass produced car which has caused government spending for highways, streets, traffic-policemen, control of air pollution.
- Rising aspirations. Health and education have always used a large part of government spending but with better education and health and that the government should provide these services, government spending has increased substantially.
- Growing urbanization. This has brought about the need for large-scale modern sewage and water systems and police and fire protection.
- Population growth. Even though there is a decline in birth rate, there remains a growth rate caused by declining death rates and immigration as well as the birth of children.
- Inflation. Prices of all goods and services have been rising over the years.
- Family changes. There has been an increasing shift of the care for the aged and ill and dependent children to governmentally financed institutions.

Suggested Learning Experiences

Possible debate topics:

Resolved: R.I. should enact a Proposition 2½ similar to the Massachusetts law, limiting local property taxes to 2½% of the fair market value.

Resolved: The federal government should balance its budget so as to eliminate deficit spending.

9.33 (cont.)

• Income instability. The move from an economy made up largely of family farms and small business to one of large economic units such as General Motors changed American workers from proprietors to wage earners. Social Security came into being, providing transfers for aged, disabled and their families. Unemployment compensation and other government financial programs attempt to deal with the problems of unemployment and income instability in an industrialized society.

9.34 Spending of governments depends somewhat on the location of the government and the people living in that location. Some stress pollution control or the maintenance of a well known trolley line while others are proud of their police protection. The activities of governments are dependent to a great extent on the values of the people in the community.

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
9.4 The student will be aware of community resources which can assist them in using the tax structure to their best advantage.	9.41 Name six social services or public assistance agencies. 9.42 Describe three services in detail which are financed through taxation.	Knowledge Abilities	Listing Written description
	9.43 Describe one agency which would be of personal benefit giving details of why this particular agency has been chosen.	Values	Paper or report

Taxonomy

9.41 There are a growing number of programs to aid people.

- Those provided by the federal government are listed in the telephone directory under UNITED STATES GOVERNMENT. A trained interviewer will probably provide booklets describing programs and how they work.
- Those provided by the state government may be called "department of social service". These offices are listed in the telephone directory under the name of the state.
- Programs run by the local government may be found in the telephone directory under the name of the local government.

Examples of social agencies are Employment Security, Social Security, Veteran's Administration, Health Clinics, Adult Education, Recreation, etc.

9.42 and 9.43

Descriptions may be found in booklets provided by most agencies and through personal contact with the agency.

Suggested Learning Experiences

Take a field trip to the nearest Employment Security Office or Government Center (such as the Government Center on Tower Hill Road, Wakefield) to discover the great variety of social services provided by the state government.

Analyze what the effects would be if we eliminated all unemployment compensation and public assistance programs.

Speakers from local agencies may be available.

Develop a master listing of agencies placing it where everyone can watch the additions. Select those agencies to be investigated thoroughly.

10. CONSERVATION OF ENERGY AND RESOURCES

Goal: Increasing the student's core of information related to energy, ecology and economic issues upon which students can base further inquiry, research and value judgements.

Specific ObjectivePerformance Indicators

10.1 The student will develop an awareness of challenges facing the U.S. and the resources, ecology and economics.

10.11 Define:
 • Energy
 • Environment
 • Ecology
 • Energy as compared to a chameleon

Level

Knowledge

Suggested Evaluation

Definitions

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
10.1 (cont.)			
	10.12 List four challenges the U.S. faces in energy and ecology matters.	Abilities	Short answer quiz
	10.13 Describe two difficulties faced from each of the following: • Air pollution • Heat as a waste product • Waste products from nuclear energy	Abilities	Panel discussions
	10.14 Describe how per capita energy consumption in the U.S. compares with the rest of the world.	Abilities	Short answer quiz
	10.15 Give a brief history of energy consumption showing trends.	Knowledge	Essay
	10.16 List four challenges that are felt to be the most pertinent ones to be faced.	Values	Forced Choice (Value Clarification)

Taxonomy

10.11 Definitions:

- Energy--The ability to do work
- Environment--The circumstances, objects or conditions by which one is surrounded.
- Ecology--The totality or pattern of relations between organisms and their environment.

Suggested Learning Experiences

What are some the advantages and disadvantages of the location of your community?
 What caused the community to be founded?
 Does the original resource still contribute to the existence of the community?

Place a clean piece of paper on a windowsill. Leave overnight. Draw conclusions.

Taxonomy

10.11 (cont.)

- Energy as compared to a chameleon--Both have a basic identity but constantly change form.

10.12 Challenges:

- Air pollution
- Land use
- Competition for water
- Ocean use
- Acceptance of nuclear energy
- Economic growth
- Energy supply

10.13 Air pollution--Transportation (especially the car), generating plants and industry to a lesser degree are the main pollutants.

Heat as a waste product (thermal pollution)--Water, because it has been cheap and plentiful and is able to carry a great deal of heat energy has been the preferred cooling medium. With the rapid growth of energy use, we are in danger of running short of cooling water. Water is also used as a drink, a cleansing agent, a recreational medium, a sewer, a transportation medium, and, by aquatic life, as a home. Increasing its temperature affects all these uses in different ways.

Problems with nuclear energy--Environmental problems have evolved around radioactive pollution, radioactive waste, and the danger of nuclear accident. The problems are statistically improbable but individually would have large effects.

10.14 The energy consumption of the U.S. is almost exactly 1/3 the world's total energy consumption, yet we have only 6% of the world's population. Therefore we enjoy a per capita energy consumption nearly 6 times the world average.

Suggested Learning Experiences

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Several members of the class keep a log of gasoline use during the week.

Discuss changes occurring in the lifestyles of young families today. Determine what has caused the changes.

Visit the local sanitation department and find out from the engineers what procedures are used for disposing of solid waste. Find out if there are paper, glass, aluminum recycling centers in the community.

Investigate local and state air pollution controls. List the major contaminants in own community.

Illustrate major events and inventions which are related to energy by drawing a time line from 1800 to present. Indicate threats to the environment, times when action was taken and any laws or regulations which have been passed.

10.15 History of energy consumption

The history of man has been one of increasing energy use. Primitive man, living without a fire had only the energy in the food he ate. With fire his energy consumption doubled. In the Fertile Crescent in 5000 B.C., primitive agricultural man had domestic animals and grew crops. Advanced agricultural man, in Europe in the Late Middle Ages, used coal, water and wind power and animals for transportation. Industrial man, in England or Germany in 1875, had the steam engine. Modern technological man, in the U.S. in the 1970's had the automobile, electricity from central generating stations, and a high level of material consumption. Primitive man used about 2000 daily kilocalories. Today we use about 25,000. (Evans. 1980)

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
10.2 The student will gain an understanding how supply and demand affects energy, including its sources, patterns of usage, and predicted future outlook.	10.21 Relate four events in this century which helped to bring about a long term shortage or an energy crises.	Knowledge	Short answer
	10.22 Compare Indian and white men's attitude toward the environment.	Knowledge	Essay
	10.23 Give three societal improvements which have helped to cause the population growth in today's nations.	Knowledge	Essay
	10.24 Describe the effects of prosperity and technology on the energy supply.	Abilities	A "pro" and "con" paper

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
10.2 (cont.)	10.25 Cite predictions for energy use in the future.	Abilities	Paper
	10.26 Give one example of an energy supply problem which could be helped by the efforts of an individual.	Values	Paper

Taxonomy

10.21 Events bringing about an energy crisis:

- In California there is a tendency of air pollutants to hang long in the air, therefore a decade before the rest of the nation saw a problem, Los Angeles was in a serious energy-environment dilemma.
- At Four Corners (where New Mexico, Colorado, Utah and Arizona join) enormous resources of coal caused the building of a huge coal fired generating plant to provide electricity to the Southwest. Plans were underway for five more huge plants when by 1969, the air pollution from the plant, in addition to social and environmental changes which were taking place caused the plant to gain national attention. This unfinished history is well documented in "The Southwest Energy Complex" by Malcolm F. Baldwin.
- Strip mining has caused the burying of top soil in 50 or 100 feet of subsoil to say nothing of the leveling of all growth. The land stripped in the Black Mesa area alone may be near 800 acres annually.

Suggested Learning Experiences

What conflicts are we apt to find as we fight an energy shortage and also try to protect our environment?

What consumer products are apt to be in short supply because of an energy shortage?

In recent years where have water shortages occurred and what has been done about them?

Keep an energy log:

- Energy that is used directly--turn on a light
- Energy that is used indirectly--refrigerate food
- Public energy--use heat in a public building
- Product made of petro-chemicals - synthetics
- Products which require energy to manufacture - clothing, appliances, etc.

Compare predictions for the growth in electricity demand for 1970-1980. What caused change in the projections?

TaxonomySuggested Learning Experiences

10.21 (cont.)

- Philosophical differences between the values and goals of Indians and the government have caused major problems.
- Oil derricks in the sea and the risk of pollution in the biologically rich coastal waters.
- Oil spillage from tankers.
- Breakdowns in nuclear plants.
- The oil embargo.
- Increased demands for energy at the same time that the afore listed events occurred.

10.22 Air and water are Holy Elements to the Indians. A statement by a young Navajo says "(Has the government) ever thought that the Navejos don't like to be up with the national standards in economics, education, employment, et cetera. We don't like this idea of keeping up with the Joneses as the white man does." (Fowler. 1975)

10.23 Good food, modern medicine, and improved sanitation have cut down the death rate and allowed populations to grow.

10.24 Consider that 98% of American homes now have at least one television set and almost half the homes have an air conditioner. One third of the nation's electrical energy is consumed by residential and commercial users, schools and government facilities. Each person used 36 percent more electricity than ten years ago.

Suggested Learning Experiences

10.25 If we continue to use energy at the present rate, without increasing the supply or improving the efficiency with which it is used, there will not be enough energy.

10.26 Long lists of personal efforts can be listed, some of which are direct--such as driving the car less, lowering the heat in the home or office or weather-stripping the windows and doors. Others are indirect such as the active support for government legislation which would have an energy saving effect.

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
10.3 The student will identify the interrelationship among energy, ecology, and economic problems and solutions in terms for the consumer.	10.31 Describe the overlap between the "energy crisis" and the "environmental crises".	Ability	Essay
	10.32 Give one example of the relationship between energy and the nation's financial status.	Ability	Essay
	10.33 Give one evidence of the relationship between energy and individual finances.	Ability	Essay
	10.34 Give one evidence of the relationship between energy and food production.	Ability	Essay
	10.35 Draw three conclusions that describe desirable solutions to the energy/ecology problem.	Values	Oral report

Taxonomy

10.31 An important lesson to learn is that "everything is connected to everything else". The improvement of the energy supply is hindered by environmentalists. Environmental improvement is hampered by the need for more energy. Consider strip mining and its effects on the land; underground mining with waste heaps, fires and black lung; oil wells in the ocean; reservoirs covering desirable land, disease, industrial plants on waterways.

10.32 The GNP (gross national product) is the way we traditionally measure the country's well-being, and energy (the value of the fossil-fuels, and the uranium and electricity that are consumer) is among the goods included. Energy contributes about 10% of the GNP. The indirect effect of energy on the GNP is much larger. In some industries an energy source is used as a raw material (plastics or aluminum) and in all industries it is energy plus labor that produces goods. The actual affect on the GNP is more closely related to how we reduce energy consumption rather than on the amount it is reduced. If we direct our drive toward using energy more efficiently we can hope this will cause an increase in the efficiency of producing GNP dollars and that the GNP will grow faster than energy consumption.

10.33 The cost of home heating fuel has increased 500% since 1973, while wages have increased by less than 100%. By spending a greater proportion of income on heating, the consumer has less to spend on other things. Many other examples are possible.

10.34 If the energy expended in growing, processing packaging, and transporting food is divided by the food consumed per household we find it requires 7 or 8

Suggested Learning Experiences

Indicate which of the following 12 steps to a food system for a frozen vegetable might be eliminated:

- Someone else grows a vegetable using energy intensive machinery and fertilizers
- Transports it to a processing plant
- It is sliced by machine
- It is packaged
- It is frozen
- Refrigerated truck takes it to market
- Market keeps it frozen
- You go to market to buy it
- Take home and put in freezer
- Thaw it and cook it
- Throw away package
- Eat it

Where does your community's food come from?
What would happen to this supply if a severe fuel shortage occurred?

Is it possible that we as a nation might actually benefit from an energy shortage?

How might an energy shortage cause unemployment, business failures, recession and perhaps a recession? How might development of alternative energy sources do the opposite?

Give three examples of short term conservation; long range.

How might the following businesses and industries contribute to solving energy and ecology problems?

- building industry
- airlines

Taxonomy

10.34 (cont.)

Calories of fossil fuel energy to get 1 food Calorie on our plate. As a consequence food prices are bound to rise with energy prices. Whether the solution is in increased technological efficiency or in a departure of farming from its path of increasing capital intensiveness--or a combination--is a highly debated subject.

10.35 The solutions chosen by individuals will be dependent on their own values. Some may find "going back to the earth" a highly desirable vehicle others would find burning of waste products as a more efficient use of our expertise.

Suggested Learning Experiences

- utility companies
- large chain stores
- oil companies

Explain ways that the energy and ecology situations relate to each of the following economic conditions:

- inflation
- unemployment
- trade deficits
- productivity
- employment
- scientific and genetic discoveries

Name some types of pollution caused or aggravated by energy production.

Compare the effects of government legislation as compared to the effects of a free market system in relation to energy and the environment.

Find news items such as "Environmentalists Block Offshore Drilling" and discuss in terms of cost, environmental issues, etc.

How might consumer spending change as a result of an energy shortage in each of the following categories?

- food
- clothing
- housing
- transportation
- entertainment

Taxonomy

10.35 (cont.)

Suggested Learning Experiences

What are some of the severe economic problems that could grow out of a water shortage?

Panel discussion: How can we solve our energy problems without destroying our environment or our nation's economic stability?

Draw up proposals for government legislation to deal with the energy/environmental crisis. Present to class for discussion.

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
10.4 The student as a consumer will make an individual plan of action to help in solving problems presented by energy shortages, threats to the environment, and related concerns.	10.41 List and explain the two major directions we may turn in order to save energy.	Knowledge	Short answer
	10.42 Give eight ways in which an individual can conserve energy while preserving the environment.	Knowledge	Short answer
	10.43 Using one local environmental problem, diagram a solution.	Values	Outline and/or Discussion

Taxonomy

10.41 We can tighten our belts and use less energy or we can improve our energy productivity. If we tighten our belts we will be driving fewer miles, turning down thermostats, turning off lights and taking shorter showers. If we get more productivity we will get more useful work and activity from each extracted Calorie of primary energy. This can be

Suggested Learning Experiences

Home activity: Demonstrate that a short shower is more energy conserving than a bath, and that a lengthy shower wastes energy.

Note: To heat one gallon of water, it takes an ounce of oil, a cubic foot of gas, or $\frac{1}{4}$ kilowatt-hour of electricity.

Taxonomy

10.41 (cont.)

accomplished by improving energy productivity and improving the efficiency with which we convert it to our use and by decreasing waste.

10.42 A few examples of conserving energy and preserving the environment:

- Reduce water consumption
- Buy fewer disposable items
- Refuse to buy overpackaged items
- Use a tote bag instead of paper bags
- Return beverage bottles and coat hangers
- Use old newspapers or recycle them
- Share magazines with friends and institutions
- Refuse to use pesticides which are hazardous to human life or wildlife
- Walk or ride a bike when possible
- Have regular tune-ups of car
- Watch research on aerosol products and discontinue use of dangerous ones
- Avoid setting open fires and burning trash and leaves
- Refrain from smoking
- Plant covercrops to preserve top soil
- Evaluate home insulation
- Check and clean filters
- Turn the heat down and the electricity off

Etc. - - - - !!!

10.43 Local problems tend to be similar to other peoples local problems or state or federal problems. However, some situations may be more pressing because of the circumstances existing in particular environments. For instance some communities have more problems related to waste disposal than other communi-

Suggested Learning Experiences

Devise a check list for a quick and easy scan of a home to reveal possible sources of energy waste and potentials for energy conservation. Make the checks and report.

List 15 (or as many as wish) things/or activities which would help conserve energy. Categorize.

To what extent can self-sufficiency become a goal for America? Discuss self-sufficiency of the individual as well as self-sufficiency of the nation.

What five changes would you as an individual be willing to make in order to conserve energy and protect the environment?

Set up an Energy Conservation Task Force to collect and provide energy conservation information. Suggestions:

- news items for school or local newspaper
- bulletin board displays
- study school's consumption patterns and make recommendations to administration
- give demonstrations on conserving energy when performing household activities
- sponsor field trips

TaxonomySuggested Learning Experiences

10.43 (cont.)

ties. Others may have problems related to a salt pond whereas such a pond does not exist in another community. Such problems will require an individual to work in and with the community. In order to take any kind of action, a plan needs to be developed if an individual wishes to take an active role. For instance, if the student is interested in helping the community to solve the problem of waste disposal, the following diagram is an example of how plans can be made.

For background
investigate, read and study:

For Action contact:

<u>Literature</u>	<u>Legislation</u>	<u>Other Communities</u>	<u>Local Environ. Agency</u>	<u>Town Council</u>
• school library	• Attorney General	• Write Chamber	• Join a sub-	• Contact president
• public library	Office	of Commerce	group	
• local energy office	• Energy Office			

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
10.5 The student will become aware of alternative sources of energy and their use for the future.	10.51 Describe four non-polluting energy sources.	Knowledge	Short answer
	10.52 Describe one effect of handling the use of resources in a way that has the least direct cost.	Abilities	Essay
	10.53 Describe one nonpolluting energy resource which you	Values	Oral report

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Level</u>	<u>Suggested Evaluation</u>
10.5 (cont.)	consider to have the most potential.		

Taxonomy

10.51 Techniques vary from the second hand solar source-- wind, water power, and photosynthesis--to those which convert the direct energy of sunlight. The most promising techniques for tapping the second-hand sources are those that involve the production of methane for the direct burning of organic material. Some pollution is involved though not from sulfur. Wind and waterpower would have minimal impact on the environment. Solar energy farms would involve many square miles of land covered with solar collectors. There is possibility in solar seapower also by collecting energy from the temperature difference between surface and deep seawater.

10.52 Strip mining destroyed millions of acres of land. Disposal of home sewage can spoil the water supply for many other people. Dumping trash in an old gravel pit may waste valuable materials. The list is seemingly endless.

10.53 This is a value decision since there is no data available as yet to recommend one energy source as being the best.

Suggested Learning Experiences

What are some measures that could be taken to minimize the economic effects of an energy shortage?

What roles do you think government should take in energy conservation, increasing energy production, finding new energy sources, protecting the environment? What effects would each government action have on the economy and the people? Will anyone have lost their rights?

What immediate and future consequences could result if we fail to deal effectively with our energy, ecology and economic problems?

Divide the class into four groups, each to represent policy makers for government, for business and industry, for environmentalists, and for consumers. Each make recommendations for the following:

- reduce America's dependence on foreign oil
- protect the environment while developing new sources of energy
- dampen demand for energy and encourage conservation
- arrive at a fair distribution of limited fuel supplies

SOME SUGGESTED ACTIVITIES FOR THE GIFTED AND SLOW LEARNERS OF SOCIAL STUDIES

1.1 The student will be able to identify and explain the basic elements of the contemporary American market system.

Gifted

- Trace the rise of the consumer movement analogous to the labor movement or compare the growth of big business and the rise of the consumer movement.
- Using any three items in the room, chart how each has been affected by four factors of production--land, labor, capital and management--in the journey from the original state to its present state.
- Scan newspapers and magazines to become aware of economic trends. Follow the trend and report to class.
- Choose three examples of government controls that affect the marketing of certain goods. Research why the controls came about, when enacted, success of the controls and provide an analysis of the necessity of the controls.
- Prepare a chart to illustrate the development of money in the United States. Do the same for another country. Develop a cartoon showing the purpose of an economic system. Using the cartoon, teach another group.
- Compare consumer problems of the 1900's with those of today. Draw conclusions.
- Do research on the economic system of another

Slow Learner

- Because this component, Basic Economics in the Marketplace, involves considerable theory, it may be the most difficult component for the slower student to understand. It would probably be better to select personal activities to help the student understand buying and selling, rather than attempt to teach too much about the economic system.
- Find pictures of consumers and sellers. Combine the pictures to illustrate purchasing and provision of goods and services.
- Draw or cut out pictures of food produced by farmers. Draw a picture of how that food gets to your dinner table. What foods are grown near your own home. Draw and find pictures and label them.
- Bring food to school that could have been grown at home but wasn't. How did you get the food? At a store? With money? Why was money used? Wash and cut the food to eat in class.
- What are the names of the departments in the grocery store? Set up some type of example. What is found in each department?
- Using newspapers, identify stores in the paper and learn how to spell and pronounce the names. Locate where the stores may be found.

GiftedSlow Learner

1.1 (cont.)

country, such as Britain, Sweden, Cuba, China, or South Africa. Explain whether it is a free market economy, a socialist or a communist economic system.

1.2 The student will develop an awareness of the interaction between supply, demand and the price mechanism.

- Prepare a circle graph that shows the Gross National Product for the past year. Data for the chart may be secured through the public or school library.
- Illustrate the circular flow of money in a free enterprise economy with a drawing showing the influence of taxes, savings, and investments and spending.
- Investigate the difference between a consumption-directed and a consumer-directed economy.
- Four students represent consumers, business, labor and government. Each student present and defend his/her point of view on a current consumer issue.
- Research: Should we have tariffs to protect American workers?
- Draw a series of sketches or a cartoon strip showing how the Federal government helps the farmer, a small business man, and the consumer.
- Prepare a set of principles to follow as a consumer citizen. Role play situations where taking too much of one item (hoarding) may cause someone else not to have the item. If possible illustrate how the price might increase.
- Using actual clothing or pictures discuss where and how we get our clothing. Why is some clothing more expensive than other clothing even though they seem to look alike. The varied cost of different brands of jeans can illustrate how demand causes prices to be higher.
- Set up a lemonade stand (or sell popcorn) for three days at lunch. The first day, charge 10¢ above the cost of materials. The second day sell for 20¢ above cost. The third day sell for only 5¢ above cost. Keep a record of how much sold and how much profit made each day. Discuss conclusions. or
- Using candy bars and token money, simulate the market place by auctioning off candy bars to students. The next day, double the amount of money and see what happens to the prices bid. Discuss.

GiftedSlow Learner**1.5 The student will understand the interdependent nature of the market system.**

- Study farming changes since the turn of the century and the relationship of these changes to profit motive.
- What would happen if one of three factors (products, merchants or credit) was not present. What happens if the availability of one or more is limited?
- Make a chart listing new items which are being tested in the market (e.g., disposable paper garments, synthetic non-growing grass, electrically heated sidewalks). Analyze how business would be affected. How would consumers be affected? How would the nation be affected ecologically?
- Write a scenario describing what your life would be like 2 years from now if the U.S. suddenly ran out of oil.

CREDIT**2.1 The student will identify the role of credit in personal money management.**

- Determine the amount of credit on a national scale.
- Get facts and figures about charge accounts from local stores:
What percent of total sales are charged?
How long do most people take to pay?
What extra services do charge customers get?
Is there a discount for paying cash?
- List all the items enjoyed that would be taken away if credit were not available.
- Find advertisements on credit and bring them to class to see how many kinds of credit can be found.
- Discuss: Does everyone use credit? Illustrate by "borrowing" an article and then returning something extra as a "thank you".

Gifted

2.1 (cont.)

- Write guidelines for the wise use of credit to be published in the school or local paper.
- Make a survey of teenage credit buying. (Lay-away with or without parents approval, using parents' charge accounts, use of own charge accounts, installment buying, loans.)
- Develop cartoons on credit, depicting humorous consumer credit situations. Place around school building. If possible monitor the cartoons to determine student reaction.
- Develop a crossword puzzle using the following terms as answers.
credit, creditor, repossess, charge accounts, carrying charge, easy payments, character, capacity, garnishment, truth-in-lending, collateral, credit cards, installment.
- Interview different groups of people to discover their attitude toward credit. Examples: the elderly, business men, college students, house wives, etc. Compare.

Slow Learner

- Examine the yellow pages in the telephone directory to determine the types and numbers of lending agencies in the community.
- Students give examples of credit extended to them by parents, brothers, and sisters.
- Discuss some definitions of credit:
 - Credit is buying now and paying later
 - Credit is a doctor bill
- Use everyday opportunities in the classroom to emphasize financial credit. Place a money value and interest rate on such items as borrowed pencils, notebook paper or books.
- Draw pictures or make posters which show the functions of credit.

2.2 The student will recognize types, sources and costs of credit for different purposes.

- Small groups work on a chart comparing operating policies, specialities, types of credit offered and credit costs of different types of lending agencies in community. Use illustrated chart to complete information.
- Collect installment credit contracts from
- Use advertisements of credit and discuss as to type and source.
- Recall the question asked of the customer after a purchase has been made, "Will this be cash or charge?" Discuss the factors that may influence the customer's reply.

Gifted2.2 (cont.)

stores and catalogues. Explain promises one would make by signing the credit contracts.

- Find out about the laws governing loans in the state. What is the maximum permissible rate for various kinds of loans?
- Find out whether a creditor can garnishee your wages if you are in default on a credit contract (varies from state to state).
- Investigate community to discover whether banks have a credit plan for 18 year olds.
- Investigate where agencies get their money, what it costs them, how they compete and how under shifting conditions the institutions have changed and government has moved into the picture, with increasing guarantees and regulations.

Slow Learner

- Discuss the hidden meaning behind, "Bring no money--no down payment required," and "Take as long as you like to pay, and only \$9.98 a month."
- Make a bulletin board display of principal sources of credit in the community and their interest rates.

2.3 The student will understand the benefits of establishing a sound credit rating.

- Investigate the kinds and sources of information recorded and utilized by credit bureaus. Visit a credit bureau.
- Formulate guidelines for maintaining a good credit rating. Place in school paper or local paper.
- Invite a bank's loan officer to speak to a group about how to establish a good credit rating when you are 18. (Or interview a loan officer and report to the class.)

- Discuss why a "good" name is important. Cite examples such as borrowing books, school supplies, or personal articles and how important it is to return them on time. Other examples are keeping secrets and always telling the truth: Role play.
- Explain "trust" as the basis for credit.
- Discuss how others' (friends, employers, ministers) opinions of a person's trustworthiness can be checked.

Gifted

2.3 (cont.)

Slow Learner

- Identify personal habits and practices established early in life that are recorded on the consumer's card file in the credit bureau, such as a record of "on time", "frequently changes jobs", "slow pay."
- Fill in an application for a bank loan, imagining that you are 25 years old. Then explain why they asked you each question (how long at previous job? etc.)

2.4 The student will understand the use of credit in terms of present and future needs, wants, expenses and income.

- Chart the family life cycle. Determine how credit capacity and uses for credit change.
- Prepare a display illustrating the changing needs and uses of credit by a family at different stages of the life cycle. Place the display where many people can see it--in a church, a store, a bank.
- List and give explanations of the different types of credit that each of the following may have:
 - you or a classmate
 - a young family
 - a neighborhood retail store
 - the local government.
- Discuss: Do families that buy on credit buy more than those paying cash and if so, what effect does it have on next month's spending, the feeling of security about money and family relationships.
- Look ahead to some specific expenses expected in the near future. How will you handle them?
- Role play a consumer being pressured into making a purchase. Stress taking time to think and asking for advice.
- Role play a situation where there are many things that could be purchased. Emphasize the need to check the budget (or ask advice) before making a purchase using credit.

How does each determine when a debt limit is reached? Present the comparison to a group.

GiftedSlow Learner**2.5 The student will understand the decisions that come into play influencing borrowing.**

- Use rational decision making (inquiry, valuing, decision and action) to analyze several credit situations.
- Apply the elements in the process of inquiry to credit decisions:
 - Recognizing the problem
 - Considering tentative solutions
 - Clarifying terms and concepts
 - Collecting data and evaluating data sources
 - Analyzing data and developing a conclusion
 - Applying the conclusion to new situations
- Establish a criteria for evaluating credit agreements.
- Construct a chart illustrating an individual credit potential including income, savings, debt record and personal characteristics.

GiftedSlow Learner**2.6 The student will be aware of the changes inherent in the over use of credit.**

- Prepare a paper, "Credit is like fire, so long as it is kept under control it is a great danger."
- Find articles in the newspapers concerning personal bankruptcies to become aware of the increase in the filing of bankruptcy among individuals. Compare number filing today to number filing thirty years ago.
- Interview attorneys, credit department managers, and loan agents to determine what happens when an individual or family cannot meet its credit obligations. Find out what help is available in the community when a family is in financial crisis and what the position of a minor is in relation to credit contracts. Report findings. Or, interview the R.I. Consumer's Council.
- Discuss "The World is Just a Signature Away." Develop guides for use of one's signature.
- Role play members of a family whose credit is over-extended. Show how they intend to work things out.
- Given a case study about a person whose credit is overextended, list his alternatives and explain what would be the best solution.

CONSUMER LAW/PROTECTION**3.1 The student will be able to understand the basic elements of a contract: offer, acceptance and consideration and mutual agreement.**

- Go to an automobile salesman and determine the following:
 - Who actually owns the auto until it is paid for?
 - What restrictions are put upon its use by the buyer?
 - What happens if payments are not made when due?
 - If the car is repossessed, is there a
- Grab bag. Teacher place examples of contracts in a container. Each student gets to reach in and select a contract which is used in discussion, giving good and bad points of each.
- With a partner, write out a simple sales agreement to cover the sale of your used car to him. Include the names of the buyer and seller, a full description of the car, the price, the date, and

GiftedSlow Learner

legal claim by the seller for the unpaid balance?

both signatures.

- Develop an exhibition of legal documents with explanations of the documents. Make the exhibit available for another group, either students or other interested persons.
- Explore: What would be the effect on business if all contracts had to be in writing? If implied contracts were prohibited?

3.2 The student will understand the need for social controls, e.g., warranties and consumer laws, relative to consumer credit, deceptive trade practices, truth-in-lending, and debt collection.

- Write your congressman in Washington, D.C. and your state congressman requesting information about recent and pending legislation related to consumer protection. Share with another group.
- Using Reader's Guide to find articles, select one of the following schemes to investigate. Develop into a news story and present to local newspaper for publication.
 - Door-to-door salesman
 - Unordered merchandise
 - Telephone solicitations
 - Accepting C.O.D.'s for neighbors
 - Photography schemes
 - Charity gyps
 - Homework schemes
 - Packaging deceptions
 - Health quackery
 - Career schools
 - Mail fraud
 - Magazine subscriptions
 - Home improvement
 - Bait advertising
 - Referral racket
 - Debt consolidation schemes
 - Business opportunity schemes
 - Wholesale prices,
- This section needs to be handled carefully with the slow learner. Though "gyps and frauds" need to be understood, it is better to avoid scare tactics which could add to the fears the student may already be encountering. Try to use a positive approach stressing the protections against fraud which help the consumer.
- Use magazine articles, booklets, filmstrips and posters to introduce various gyps and frauds. Each student may then select a type of fraud to illustrate in a poster.
- Select a consumer law and make a poster to illustrate the law.
- Check newspapers for reports of consumer fraud or quackery and organize clippings under heading for bulletin board display or class presentation. Headings could be items such as short-changing, short weight, repair swindles, deceptive

Gifted

3.2 (cont.)

- Correspondence schools sales, "free" items, contests.
- Investigate the reliability of approval given by various approving companies or organizations.
- Name 10 products and services you have used recently, and indicate how regulations affect the production, sale, or use of each one.
- Certain areas of government regulation are the subject of continuing controversy. Prepare a report on what has happened recently in one of the following areas.
 - Food and food additive safety
 - Drug safety
 - Automobile safety
 - Safety of products under control of CPSC
 - Transportation regulation
 - Antitrust regulation
 - Regulation of advertising
- Interview housewives, students, business men and representatives from government agencies using questions such as the following:
 - Do you believe business gains or loses as a result of government regulation?
 - What consumer protection should be provided by the government and what responsibilities should be assumed by the consumer?
 - Why is it necessary to have state legislation for consumer protection?

Slow Learner

packaging, mail frauds, etc.

- Prepare a complete list of the products that are advertised in a current issue of a popular magazine. For each product indicate whether there is any seal, label, certified test or testimonial used to indicate the standard of quality of the product, and any specific proof that it is given.
- Prepare a brief report on a group (or individual) which has been important in the development of consumer protection. Some possibilities are:

<ul style="list-style-type: none"> - The Muckrakers - Ralph Nader - Consumers Union - National Consumers League 	<ul style="list-style-type: none"> - Rachel Carson - Dr. Harvey Wiley - Florence Kelley
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GiftedSlow Learner

3.2 (cont.)

- Plan a program dealing with fraudulent practices and legislation offering protection. Present to a school assembly, PTA meeting, or some similar group.
- Visit a small claims court to determine:
 - What kind of action is usually taken?
 - How long does it take to process a claim through the court?
 - Who predominantly uses the court?

3.3 The student will become acquainted with agencies of protection from fraudulent consumer schemes.

- Interview state health agency to find out the function of the agency regarding food safety.
- Collect accounts of actions taken by the FDA over a period of a month or a year.
- Debate the issue: Resolved: More monies shall be made available to provide more agencies to protect the consumer and less money made available for information to the consumer."
- Study two of the recent News Summary reports of the Federal Trade Commission. Report on the nature of the FTC activities as seen through these reports. News Summary may be obtained from the Federal Trade Commission, Washington, D.C. 20580.
- If court cases involving consumer problems are being tried, attend court during these sessions and report back to class.
- Looking at labels and packaging, discuss government standards under which industries must operate. Food labels and packages are especially easy to work with and students may wish to bring examples to class.
- Collect warranties, guarantees, seals, labels and tags as well as information about protective agencies. Make a decorative display and study the examples, grouping them so that students can remember the discussion. Leave the display up long enough to return to it, rediscuss and add to it. Encourage examples being added.
- Organize and compile leaflets on government agencies that provide protection for consumers. Make into booklets or into some form that the leaflets are available throughout the year to interested parties. Whether the process includes the students actually writing for the materials is dependent on the ability of the students and the objectives of the teacher.

Gifted**3.3 (cont.)**

- Prepare a list of recent federal consumer legislation designed to protect the consumer. Describe the major characteristic of each piece of legislation. Identify any agency which is involved.
- Prepare a "bill" on some area of consumer protection that you think should be passed by the state or federal government. Or write to your congressman about such a bill.

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- Using the catalogues of free booklets provided by the Consumer Information Center, students can fill out order blanks and send for materials.

3.4 The student will become acquainted with consumer remedies for contract and tort problems.

- Prepare a guide for self protection against contract and warranty problems. Make available to another group.
- Interview merchants to determine the best course of action for a consumer with defective merchandise. Organize the suggestions and present to another group.
- Review consumer complaint forms supplied by various businesses and regulating agencies.
- Make radioscopics about contracts and warranties for other students to use. (A picture, real object, or symbol with a question on front and answer on back.)
- Make a diagram for solving a consumer problem. Each step should have a route to take when the question asked has a "yes" response and when it has a "no" response. For example:
- Use the "In-Basket," "Out-Basket" technique to solve problems presented by teacher. Read each of the situations described on the "In" sheet and decide what you would do. Write decision on "Out" sheet and deposit in "Out-Basket."
- Role play a situation in which a piece of unsatisfactory merchandise is returned to the retailer. Stress the protection a consumer has.
- Read and discuss the legal aspects of warranties and service contracts. Make a simple guide that can be posted someplace at home to act as a reminder.
- Use radioscopics to summarize learnings regarding warranties and service contracts. A radioscopic is a picture, real object, or symbol with a question on front and answer on back.
- Review use and care instructions on various pieces of equipment. Stress need to do this before making a complaint.

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3.4 (cont.)

Do you have a problem with something you bought?

START HERE

No

Relax but stay alert.

Do you suspect fraud?

Yes Yes etc.

No

Have you checked instructions, directions, warranty?

No

- Look up recent CPSC decisions (or FDA, FTC) in CPSC Memo or other government publication. In which cases could/should consumers or business recognize a danger and make the decision on safety? In which cases would it be difficult or impossible for the consumer to recognize danger? Example - recall of water heater temperature/pressure controls which could explode. This exercise could be used to set guidelines as to how much government protection is needed. When should consumers be allowed to make decisions on the amount of risk they are willing to assume and when should government make such a decision?

• Get together the documents and items you need before making a complaint or returning a product.

• Make a list of sources available for locating the address of a business firm when you want to make a complaint by mail.

• Fill out a complaint form provided by the R.I. Consumer's Office, imagining that there is a problem with which you need their help.

4.1 The student will identify the differences between savings and lending agencies and the various services provided by each.

- Obtain a financial statement from a local sav-
- Using a shoe box for illustration discuss ways

Gifted

ings or lending agency or one published in a newspaper and answer the following questions:

- a. What are the kinds of assets in which the bank has its money invested?
- b. How much cash does the bank have on hand or on deposit with the Federal Reserve bank?
- c. What are the different kinds of liabilities or amounts owed by the bank?

- From the financial page of the newspaper or any other source, obtain information in regard to bank clearings through the local clearing-house for a recent month. Compare these with clearings for the same month in the previous year and give your conclusions as to the local business activity.
- Investigate how the policies of the Federal Reserve System affect the individual consumer. (Discount rate, reserve requirements and open market operations).
- Investigate community facilities to find the lowest priced method of paying five bills a month.

4.3 The student will learn how to select a bank or savings and lending institution.

- Visit banks, savings and loan associations, credit unions and insurance companies to discuss plans in terms of safety, earnings, and liquidity. Report.
- Investigate the services offered by savings and lending institutions and discover whether there is a charge for the services. Prepare a
- Prepare a bulletin board or some illustrative area showing the functions of savings and lending agencies.
- Using an interest rate table, find out the difference between \$1000 at 5% for 5 years and \$1000 at 8% for 10 years. (Learning to read tables is an important skill for

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of saving money and why some ways are better than others.

- Role play selected activities taking place in a bank to discover how you can get services. Visit a bank if possible. Where is the best place to get help in a bank?

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GiftedSlow Learner**4.3 (cont.)**

chart indicating in one column the nature of the services provided and in the second column the fees, if any, assigned to each service.

slow learners, and it will illustrate the significance of comparison shopping.)

4.4 The student will know the mechanics and responsibilities of maintaining a checking account.

- Study check formats, bank books and other necessary materials for using a checking account. Design similar materials to be duplicated to be used by other students.
- Make a display of each of the following providing information of when and how each is used:
 - cashier's check
 - certified check
 - traveler's check
 - personal check
 - Money orders
 - postal
 - bank
 - American Express
 - telegraphic

Cash - receipts for cash payments
Bank drafts
C.O.D.

- Using a Checking Account by Sharon Bywater is a splendid study booklet for the slow learner. See resource listing.
- Using duplicated materials, learn how to write checks, keep records and reconcile the account.

4.5 The student will know how to develop a sound savings plan.

- Conduct a survey to find out why people save. Interview:
 - A single man
 - A single woman
 - A young married couple with no children
 - A married couple with children
 - A couple with college-age children
 - A middle-aged couple
 - Head of a one-parent family with children
- Illustrate "saving" using simple objects at first such as saving cookies for future use. Move on to saving money, using make-believe money and then illustrate interest. A piggy bank could be used to illustrate non-interest drawing money.
- Develop reasons for saving starting with simple suggestions such as saving food in case you are hungry later or saving a book in case you wish to

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4.5 (cont.)

Draw conclusions and report.

- Make a comparison chart listing the advantages and disadvantages of the various kinds of institutions in which you can invest your savings. The chart should include information on returns on your savings as well as liquidity and pertinent services. Draw conclusions.

read it later. Move slowly into more complex situations. Watch for a careful balance between "using now" and "saving" to be sure students do not get wrong impressions about what, how and when to save.

- Saving and Investing by Doug Weeks is an excellent study guide for the slow learner. See resource listing.
- List the things that you might want to have money for at various stages in your life that would require a savings plan. (Teenage years, 20's - 30's, 40's - 50's, 60's +.

COMPARISON SHOPPING FOR GOODS AND SERVICES

5.1 The student will be able to differentiate between buying and comparison shopping.

- Select a product to test, adapting the procedures used by Consumers Union.
- Read an issue in Consumer Reports and write an essay supporting: "Ratings from consumer-sponsored testing organizations are reliable."
- Write the Superintendent of Documents, Government Printing Office, Washington, D.C. and ask for their publication list in an area of interest or visit the local extension office and ask about the publications they have available. Report on the amount and kind of information it is possible to find.
- Role play a situation in which the members of a family have different plans for purchase. Stress cooperative planning considering resources, satisfactions and preferences.
- Role play a discussion with a salesperson stressing kinds of questions to ask and how to accumulate information.
- Complete the sentence: "It is a pleasure to wait on customers who"
- Using pictures of food--or better still, real food--discuss how good a buy it is considering nutrition, season of the year, purpose in the diet and unit price.

Gifted

5.1 (cont.)

- Prepare a poster: "Tips for Used Car Buyers." Research the subject first by contacting people who have bought used cars, reading printed materials on the subject and visiting some used car lots.
- Contact the AAA to find current information on driving costs. Information may also be found from Department of Transportation.
- Compare the cost of travel between two cities 1000 miles apart, by car, bus, train, plane or other available means. Make a chart showing the comparative costs.
- Ask a number of students to make a list of unnecessary items bought in one week. Combine the lists into categories and draw conclusions.
- Draw a cartoon strip contrasting wise and unwise buying habits.

5.3 The student will be able to identify the different methods used by producers and retailers to alert them to comparative value, e.g., unit pricing, labeling, advertising, store brands, sales, etc.

- Design a store arrangement that would cause people to possibly make purchases they had not intended to make. What senses do you first appeal to - intellectual, visual, sensory? Why did you choose the stimulation you did?

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- Choose items (clothing, equipment, etc.) which have been purchased and proved to be good purchases and others which have not been so satisfactory. Discuss how the purchases were made and why the results were as they were.
- Select an item which might be purchased and slowly, step by step role play the process of making a good choice. Include interviewing a sales person, examining the product, making comparative costs and organizing the information.
- Illustrate a basic necessity (food) and a luxury (jewelry). Discuss which would be purchased first.
- Make a display of nutritional labels from "junk foods" and foods that are high in nutrients.
- Make a list of "do's" and "don'ts" - rules to follow when grocery shopping - to help you to put an end to "impulse buying".

- Make a poster illustrating "helps" a store may offer to aid the consumer. Grocery store items might include labels, special displays, unit pricing, brands, price displays and other similar techniques. Study each carefully to determine where the best help might be obtained. Some techniques such as labels might be studied in detail.
- Research: Compare prices of items on special display with the same items on the shelves. Is

Gifted

5.3 (cont.)

Slow Learner

there a price difference? Draw conclusions.

5.4 The student will identify the different types of retail outlets available to consumers.

- Research: Study the community (define the "community" in small enough terms to make the research feasible) to determine what is available:
 - retail stores (department, specialty, variety, discount)
 - non-store retailers (door-to-door salesmen, mail order services, vending machines)
 - cooperatives
 Present findings to another group and draw conclusions with the group concerning shopping techniques which are available for different areas of purchasing.
- Select a private business or industrial organization and find out its functions and purposes. Present the information in a "question interview" television type program or prepare an illustrated talk.
- Study the items in a Health Food Store. Compare with a standard grocery store. Are the items which are available different? What differences appear in costs? If possible, study other health food stores.
- Design a list of activities to complete in a particular kind of store (grocery, fabric, hardware). Perform the activities in several of the stores and then compare the kind of service received from each. Activities should
- Make a large wall chart to compare shopping in different kinds of stores--neighborhood, supermarket, other--stressing where it is possible to receive help in each. Visits to the stores would be very desirable.
- Go to three retail stores that sell bootlegged cordoroy Levis (or Dickies, or---). Compare the prices. Make a chart to show the comparison.
- Using the newspaper ads before Christmas, compare the price of a popular toy advertised by 3 stores. (Or in April, the price of Scott's and Vigero fertilizer at 3 stores.)
- Draw a picture or a cartoon to illustrate the differences between types of retail stores.
- Bring in newspaper ads for sales at various department stores. Discuss the differences among discount prices, manufacturer's suggested list price, special purchases, mark down sales, "irregulars".

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5.4 (cont.)

include requests for service and complaints. They might also include the use of rest rooms, obtaining food to eat and using telephones.

- Price similar items, one in a store and one in a catalogue. Trace items from manufacturer to consumer and report the design, production, and marketing of the two, drawing conclusions concerning differences in price.

5.5 The student will apply the techniques of comparative shopping when selecting services, e.g., insurance, health services, credit, recreation, etc.

- Make a series of cost comparisons and present to another group. For instance compare the cost of upkeep when a garment is cleaned by
 - professional dry cleaners
 - coin operated dry cleaning
 - machine-washed at home
 - coin operated washing machine
- Prepare leaflets describing services and how they may be shopped for the same as goods.
- Go to three credit institutions (a credit union, a commercial bank, a finance company) to compare the costs of a one year, \$1000 personal loan. Make a table to show the comparison.
- Role play a situation in which a service is needed. This might include taking a T.V. set to a shop for repair, the services of a doctor or lawyer, having eyes tested and glasses made. Discuss the incidents and draw up some general guidelines. For instance:
 - How to determine the cost
 - How to determine when and how paid
 - How to agree on exactly what will be received for your money, and when
 - The importance of understanding the terms of any paper you will sign, etc.

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ADVERTISING AND OUR SOCIETY

6.1 Students will gain an understanding of the purposes and techniques of advertising.

- Study: why do some economists believe that advertising gives an unfair competitive advantage to large companies?
- Write a story about a supermarket which had no advertising of any kind in evidence.
- Compare the need for advertising in the Soviet Union with the advertising requirements of American industry.
- Investigate: How much is spent on advertising each year? What manufacturing industry spends the most per dollar of sales for advertising?
- Investigate public service advertisements. Are they effective? Have any changed your opinions? Are any misleading?
- Collect some advertising from older newspapers and magazines. Compare with recent ads. Is the quality of the ads changing?
- Develop a visual which illustrates the psychology of advertising. Use with a group of students.
- Write a report on "subliminal" advertising. (See Vance Packard. The Hidden Persuaders.)
- Think through a day and discover when you are affected by advertising.
- Compile clothing advertisements that are directed toward teenagers. Discover the useful ideas that can be found.
- Cut out different kinds of ads from newspapers and magazines.
- Try to discover whether the information in the ads is useful or whether it is a "trick" to make you think the product is better than others. Also describe how the ad is trying to influence your feelings.

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6.2 Students will be able to identify consumer needs, wants and interests based on values.

- List the times you are most likely to suffer from Parkinson's Law. (Work will expand to fit the time allowed.)
- Produce a skit, or a set of visuals illustrating alternative life styles. Use as an introduction to a discussion.
- How do financial resources and environmental resources affect a "way of life". Illustrate in chart form or develop an illustrated talk.
- Make a list of several issues that are being considered by your town, county or state and state your position on the issues. How is your position related to values?
- Concentrate on one particular period in history and gather samples of ads during that period. Analyze them in terms of how they reflect the social trends and living standards of that period.

6.3 Students will be able to recognize and categorize emotional appeals in advertising.

- Tape radio or T.V. Commercials. Use with a group of students to help them distinguish how each commercial makes an appeal.
- Develop specific ads which appeal to specific audiences.
- Select different ads from newspapers and magazines and discuss:
 - What makes the ad appealing?
 - Does the ad also give good information?
 - Is it factual?
 Who can find the best ad--the one that gives the best information.

Gifted**6.3 (cont.)**

- On a display board of some kind, prepare an arrangement of advertisements properly captioned and labeled to illustrate the kinds of appeal made and use the display is presenting the material to an adult group.
- Debate: Resolved: "Parents shall censor the T.V. viewing of their children." or "National Guidelines should be set for T.V. programs."
- When you see a false, misleading, or undesirable ad, write the manufacturer of the product advertised asking for an explanation. If necessary follow through and request information from the local FTC office.
- Study the ads in recent magazines or newspapers. What claims can you find that you believe should be supported with scientific evidence? What kind of evidence or tests would be necessary to supply satisfactory proof?
- Develop transparencies to be used with other students in studying the appeal of different kinds of advertising.
- Develop a script in which all advertising has only logical appeals.

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- Collect the ads from several newspapers which are concerned with bargains. How can you tell whether these are bargains? Where can you go for help to decide whether an ad really is about a bargain?
- Make a collection of ads that have rational appeals. Mount them and make labels to show why they are good.
- Develop a checklist for evaluating ads. Use the checklist on ads which have been collected.
- Students develop posters to show emotional appeals used in advertising.

6.4 Students will be able to identify and classify motivational techniques in advertising.

- Examine some marketing journals, such as the Journal of Marketing and the Journal of Advertising Research. See what some of the authors writing in these magazines believe is necessary for successful advertising.

- Study the ads for a product in which you are interested. What information do they provide? How helpful are they? Are they accurate? Complete? Understandable?

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6.4 (cont.)

- Distinguish between informative and defensive advertising. Find examples.
- Ads must get our attention, be remembered and move us to action. Check ads in both the print and broadcast media and list some of the techniques used for each one of these three purposes.
- Read and report orally on From Those Wonderful Folks Who Gave You Pearl Harbor by Jerry Della Femina.

- Prepare an ad that has the kinds of information and appeal you would like to have available in an ad.

6.6 Students will be able to identify informational sources of advertising: ex. classified ads, periodicals, educational materials from business, industry, and professional organizations.

- Make slides, posters or a flip chart showing various sources of information. Develop into a discussion type presentation for a group.
- Provide a script and videotape a scene of a consumer searching for and/or using different sources of information.
- Study a display of the sources of useful information for a consumer. Investigate some of the sources to see how they are best used.
- Make collages showing various sources of information.

RESPONSIBLE BUDGETING

7.1 Student will understand the value of the budgeting process.

- Write and produce a skit for a group, "Where Oh Where Does My Money Go?"
- Study The Federal Reserve Bulletin, The Survey of Current Business, Business Conditions Digest, or The Monthly Labor Review to find
- Discuss the meaning of "take home pay". Illustrate with pretend money or with pay check stubs.
- Using the "take home pay", place in piles or budget envelopes to denote the amount needed for expenses. Illustrate the need to understand where

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7.1 (cont.)

out what inflation has been during the past year or so. Different price indexes are used.

- Interview or accumulate case studies of five people of different ages and socioeconomic conditions to find out the three things they want most. Ask them to list their wants in order of importance. Report to another group how wants vary according to age and lifestyle.
- Analyze the meaning of "family income". Note where money is available from sources other than salary or wages, such as investments, rent, pensions, gifts, inheritance, Social Security, insurance, or public assistance.

7.2 The student will understand the interrelationships among budgeting of time, energy and money.

- Make a visual which compares a spending program to a road map: identify destination, consider alternatives and set priorities.
- Select a project, such as painting a room, which could be done by yourself or by someone else. Design a worksheet which permits cost estimates and questions of time, effort, capabilities, etc. Using the sheet, make estimates of the outlays needed in each approach in order to complete the project.
- Practice some routine tasks which illustrate how time and energy can be saved. For instance, setting a table, getting rubbish collected from the house, getting ready for a trip, etc. Illustrate how the use of some time and energy can allow one to save money for another purpose. For instance, cleaning own home, shoveling the snow, preparing more foods "from scratch". When might it be better to spend the money rather than the time and effort? Come up with some general work simplification ideas.
- Make a poster of people doing the same activity which shows one person wasting time, energy and money and another person doing the same task conserving time, energy and money.

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7.3 The student will identify the steps involved in constructing a personal budget.

- Choose two or three lifestyles and calculate what it costs to maintain that lifestyle today. Considering the present rate of inflation, what would it cost in each instance five years from now.
- Investigate the cost of living in different areas. Why do the costs differ?
- Display and learn terms to be used in budgeting: income, fixed expenses, flexible expenses, emergency funds, etc.
- Using a certain amount of money (make believe bills can be duplicated) list ways in which it might be spent. Does each person want to spend it in the same way?
- Examine a record of actual expenditures and classify them under "fixed" and "flexible". Review the "fixed" expenses to see what savings could be made without sacrificing any personal or family values or goals. Review the flexible expenses to see which take priority and which could be reduced.

GiftedSlow Learner**7.4 The student will understand the mechanics of setting up a record keeping system.**

- Conduct a survey to discover how different families keep financial records.
- Develop different kinds of record keeping systems. For instance, one that gives immediate feedback, one that makes future projections easier, one that encompasses a "sliding" pattern of exchanges between columns. A complete library search will be necessary, materials analyzed and the best chosen. Alterations will then be necessary to suit personal needs and wants.
- Using a simplified format, practice keeping records of expenditures. Use actual personal income and expenditures, or assume a part time job earning \$30 a week and imagine how this money would be spent.
- Using your own personal income (pretend you have a job which grosses \$45 a week) work out a budget including all of your expenses.
- Make a poster which has pictures of all types of expenditures that have to come out of a family's budget. Be really creative and specific and look for "hidden" or "taken for granted" expenditures which most people forget to include.

7.5 The student will be aware of the need for flexible budgeting due to changes in the economy, personal life style and family.

- Make instant slides concerned with flexible budgeting for use in the classroom. See Resource Section for instructions.
- Use the budgets drawn up in 7.4 and role playing to show how changes sometimes have to be made in a budget and how such changes need to be considered at the time the budget is made.

INSURANCE**8.1 The student will understand the underlying principles of insurance.**

- Select two nationally prominent politicians and compare their stands on Social Security measures.
- Develop the concept, "When there is a problem, insurance is there to help you." Demonstrate with simple role playing activities: Several people give coins or paper money to the "insurance agent"

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8.1 (cont.)

- What are some of the social and economic changes of the last century which led to the development of such programs as Social Security?
Outline: Make an illustrated talk to give to another group.

- Collect information about State laws concerning insurance regulations from the Commissioner of Insurance, Department of Commerce.
- Write a skit illustrating different kinds of risks a person might run into in one day, if he were unfortunate enough. Lead a group discussion about the concept of insurance and the types available for each risk.

who holds the money until one person needs help.

8.2 The student will identify the various types of insurance and define the area of protection each provides.

- Develop some guidelines that would help an inexperienced shopper select insurance wisely. Present to another group.
- Research the background for the Social Security Act, why the act was passed, the philosophy upon which it is based, the constitutional grounds for such legislation and public opinions concerning it.
- Investigate the laws in the state concerning workman's compensation. How do you apply for benefits? Explain to another group.
- Develop a game in which contestants must identify the type of insurance which protects each type of loss.
- Using illustrations which picture different kinds of insurance needs--a home and its contents, a car, a person (health), etc. Discuss how wise it is to insure in order to protect, always stressing the positive side. Stress the availability of people who can help in the making of insurance plans.
- Make two lists, one of the kinds of property that need to be insured and one of the kinds of personal emergencies that should be covered by insurance.

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8.2 (cont.)

- Develop both sides of the argument, "A system of national health care" should be developed in the U.S. (Research Canada's and Britain's socialized medicine programs.)

8.3 The student will understand how to select the company, type of coverage, and level of coverage.

- Prepare a chart showing the major features of the various forms of life, health and auto insurance and premium rates for each. Use chart with a group of students.
- Examine hospital statements for a broken leg, having a baby, etc. Research the provisions for medical insurance provided by different groups. Compare.
- Use the telephone directory to discover different insurance agencies and companies. Discuss the difference between insurance companies and insurance agencies. Develop lists of questions that might be asked at each. Practice asking questions. Determine who might help in making a choice of insurance agents.

8.4 The student will understand the relationship between financial status and need for insurance coverage.

- Make a comparison chart for the insurance needs of people of different ages and in different circumstances: a child, young single,
- It would probably be better to help the slow learner only for present conditions. Too many alternatives could be puzzeling.

TAXES

The following objectives are combined as a basis for the activities which follow.

- 9.1 The student will understand the reasons for and types of taxes within each level of government.
- 9.3 The student will be aware of how tax dollars are used to support various programs.
- 9.4 The student will be aware of community resources which can assist them in using the tax structure to their best advantage.

9.1-9.4

- Using graphs show how federal, state and local taxes are disbursed. Draw conclusions from the spending differences shown on the graph.
- Study the present federal administration's tax and spending policy. How does it differ or compare with the administration's of Franklin D. Roosevelt, Dwight D. Eisenhower and James E. Carter?
- Research: Who benefits from tax loopholes? Does the progressive tax system encourage tax loopholes? What are the present tax loopholes used and popular among businesses?
- Research and compare New Hampshire, Massachusetts and R.I. in the types of taxes each state levies to raise revenue for state expenses. Analyze the reasons for the differences.
- Study the problems of a large city in raising enough revenue through property taxes to provide for needed services.
- Students imagine a salaried job for themselves such as cab driver, waitress, nurse. With play money pay the student a week's wage. The student should decide how much of the week's salary goes for state and federal taxes. Discuss where the taxes are used after it comes out of the paycheck. If possible students might check their parent's paycheck to see the amount spent on taxes or teacher can provide sample paycheck stubs.
- Prepare a collage of grocery store items for which a sales tax is charged.
- Prepare a collage of items (food, medicine, magazines, clothing) which are exempt from sales taxes.
- Make a list of 10 items you will buy this year all about \$1. By using pennies students plan on how much extra money is needed to buy the 10 items because of sales tax.

ECOLOGY

10.1 The student will develop an awareness of challenges facing the U.S. and the resources ecology and economics.

- Through some form of art expression (ceramics, photography, painting) show how you feel about coal strip mining.
- Build a mock strip mining area. Then do some mining. Show how the land surface is disrupted because of coal mining.

Gifted

10.1 (cont.)

- Make a survey of the community to discover energy and environmental problems. Factory waste disposal? Sewage disposal? Land fill? Polluted river?
- Contact the local zoning board and discover what problems exist in the community in regards to land use.
- Use the current figure of the cost of oil to compare with the \$2 a barrel cost in 1974. Draw an implications chart illustrating all of the possible effects of this price increase. Consider prices, taxes, government regulations, farmers, economy, etc.
- Research how land use decisions are made in the community. In the state.

10.2 The student will gain an understanding how supply and demand affects energy, including its sources, patterns of usage, and predicted future outlook.

- Investigate: (a) the source of the city's water supply and (b) the source of electrical energy. Are each adequate for now? For the future? Does any action need to be taken? Suggestions? How could such action be put into motion?

10.3 The student will identify the interrelationship among energy, ecology, and economic problems and solutions in terms for the consumer.

- Do a cost analysis between heating a space 10 feet by 20 feet, with coal, wood, oil, gas and

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- Sketch a scene giving the effect of clean pure air. How do we keep it that way?
- Walk around an area (the school yard for instance) and pick up trash. How can the condition be helped?
- How can you make others more sensitive, aware and helpful in eliminating the trash problem.

- Watch a puppy play and relate its energy source to food. Using a standard format such as the sentence below have students list other things which use energy and state its source.
A _____ works because its energy source is _____.

- Start a newspaper recycling center. Study why it is important to reuse the newspapers.

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GiftedSlow Learner**10.3 (cont.)**

solar. Recommend ways in which more energy can be conserved from your analysis. Correlate with protection of the environment.

- Study the National Energy Act to determine exactly what the scope of the act is. What is available from the Department of Energy's Education - Program to help the consumer? (See resource listing).

Research and write a paper concerned with the cost of feeding the American public. This should include costs of growing, transporting, merchandizing, etc.

10.4 The student as a consumer will make an individual plan of action to help in solving problems presented by energy shortages, threats to the environment, and related concerns.

- Investigate the latest energy efficient inventions for sale. Determine the number of years it takes to reap the benefits from making an investment in an energy saving device.
- Prepare a recipe for nuclear fusion. Include the necessary ingredients and amounts to power 1 million homes.
- Devise your own energy saving device. Draw a diagram to show how it would work or construct it as a project. How would you use the American market system to sell your product?
- From the moment you wake up to the time you go to bed list how you individually use electricity. Compare with other classmates. Could you have saved any?
- Students conduct a sample survey asking the question, "How Can We Keep Our Earth Clean?" Tabulate the results and discuss.
- Take a "field trip" to some area that is in need of volunteers to clean it up (a deserted lot, a river bank, a beach, etc.)

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10.5 The student will become aware of alternative sources of energy and their use for the future.

- Survey local colleges and universities. Determine if research on energy alternatives is being done. Describe.
- Research one type of synthetic fuel.
- Research how national agencies such as the ones listed below feel about nuclear power plants and breeder reactors.
 - American Petroleum Industry
 - Atomic Industrial Forum
 - Center for Renewable Resources
 - Electric Power Research Institute
 - Environmental Defense Fund
 - National Coal Association
 - Solar Energy Research Institute
- Grow a garden if possible, or plant some quick growing seeds. How does this help in an energy shortage?
- Sit in the classroom in various positions--in the sun, in a draft and in an area where no sun-shine reaches. Decide the comfort of each and why. How can this knowledge be used?
- Using several garments such as a sweater, scarf, cap, gloves, jacket, etc. study how clothing can be layered to maintain comfort without increasing the heat in the room.

english

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Forward for English

The Consumer Citizenship Curriculum Guide for English has been developed to help English teachers incorporate some parts of the Rhode Island Consumer Education Curriculum Guide in their subject matter area. All of the objectives covered in the R.I. Guide have not been included in this English Guide. A Grid may be found in the Appendix. It gives a detailed picture of the consumer objectives chosen for Social Studies, Science, Mathematics as well as English. Hopefully, as the student moves through these four subject matter areas the objectives will be adequately covered. The R.I. Guide does not assign numbers to any of the components or specific objectives; however, in this English Guide we have done so.

English Philosophy

The following philosophy, drawn from the Tri-University Project on Behavioral Objectives in English (Hook, 1971), was used in developing the Consumer Citizenship Curriculum Guide for English.

English prepares young people with skills for using their language through reading, writing and listening. An English teacher conveys these skills by helping the student understand verbal and non-verbal communication and its impact on speaking and listening in the communication principles of the English language. An English teacher must develop a student's reading appetite so he may respond with his own values. Recognizing and using writing as a way of ordering, understanding and communicating his experiences is vital to a student. Finally, an English teacher helps students discriminate among mass media since much of what they read, do and say will be their response to what the mass media disseminates.

With the unexpected challenges which life offers a student, a knowledge of English is essential for an understanding and appreciation of the interdependence of the world's many facets.

How to Use This Guide

1. Study the Guide format which gives the main component, the goal and specific objectives.
2. Each specific objective lists performance indicators, the English skill(s) used and the suggested evaluation for each performance indicator. A number in parenthesis after a suggested evaluation relates to the learning experience.
3. The taxonomy will help teachers understand the consumer knowledge related to the performance indicator.
4. Suggested learning experiences provide activities which are directly or indirectly related to the specific objective. No effort has been made to provide a complete list of learning activities; however, we have made an effort to suggest some of the more unusual activities. Study the performance indicator and then select, rearrange and add suitable activities to provide the learning experiences desired.
5. No attempt has been made to place the suggested learning experiences in a specific order or sequence.
6. Some learning experiences for the gifted and slow learner appear after component 10.

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1. BASIC ECONOMICS IN THE MARKETPLACE

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Goal: Understanding the nature of the basic economic problem of scarcity where people, with unlimited wants and needs, live in a world of limited resources.

<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation*</u>
1.1 The student will be able to identify and explain the basic elements of the contemporary American market place.	1.11 Define pertinent terms. 1.12 Describe three primary economic systems. 1.13 Give characteristics of the American Economic system. Provide examples of major influences and problems. 1.14 Respond to the question, "Do we still have a free market place?" Indicate your own values.	Dictionary Library Oral Writing	Definitions Oral report (see 1) Interview (see 2) Contest entries (see 3)

* Check Suggested Learning Experiences column for numbers in parentheses.

Taxonomy

1.11 Terms and concepts pertinent to the marketplace:

- Economic freedom: Freedom of choice to buy or to reject.
- Economic growth & stability: Total value of all the goods and services produced in a year. (Gross national product).
- Inflation: Rapid price increase that decreases consumer buying power.
- Economic stability: Monetary and fiscal policies which help regulate money and credit.

Suggested Learning Experience(s)

1. Using the Reader's Guide in the library find examples of where the primary economic systems exist in the U.S. Report orally to class.
2. Students interview their parents to decide under which economic system they are employed. Write the parent's reactions in a paragraph.

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Taxonomy

- Economic security: Steady income, both present and future.
- Economic justice: Distribution of wealth in a fair and equitable manner.
- Monopoly: Relatively complete control over price and quantity of product produced is held by one or more sellers.
- Oligopoly: a market situation in which each of a few producers affects but does not control the market.
- Economics of Scale: Large firms develop lower unit costs of production.
- Economic voting: People vote for a product or service by spending money for it and thus accepting it.

1.12 Three primary economic systems

- Centralized -- most decisions on production are made by one person or group.
- Decentralized -- most economic decisions are generally made in the marketplace.
- Shared -- decisions made partly by an authoritarian leader or group and partly by the market,

1.13 In the United States the economy should probably be labeled as "market-oriented". It has:

- Private property -- Americans have incentives and the right to buy and own personal and business property, but the government serves as a "watchful eye".
- Free enterprise -- Americans can produce anything governed only by restrictions in the public interest. There is government control in that unsafe goods are not to be made (nor can people print their own money!).

Suggested Learning Experience(s)

3. Sponsor a contest. Judge contestants' entries from essays entitled, "The American Economic System, It's Power Over Me." Give a prize for the best entry. Publish in the school newspaper.
4. Play monopoly to show how money can be put back into the economy for building.

- Profit motivation -- the desire for income left after paying all expenses can be either positive or negative. When positive it can lead to personal wealth and increased national development. When negative it can lead to exploitation of consumers, businesses and even governments.
- Competition -- for survival, a business must be operated effectively and efficiently. Helps to keep quality up and prices down, and reasonable quantities produced.
- Supply and demand -- necessary to answer how much is to be produced and at what price to sell the products. There is continual bargaining between producers and consumers in the marketplace. Ultimately, barring extreme controls or market restrictions, the price that consumers are willing to pay for goods will be close to that which the producers are willing to produce and sell.

1.14 Business, governments, and consumers should work together performing own functions to the best of their ability. Business must be accountable to itself, to the government and to consumers. Too often business owners, managers and also the public, look to government for regulatory guidelines and enforcement. For example, if businesses make unsafe products, why is it necessary for the Consumer Product Safety Commission to issue regulations requiring businesses to notify the government that the product tested is unsafe? Is it true that business does not care?

<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation</u>
1.2 The student will develop an awareness of the interaction between supply, demand and the price mechanism.	1.21 Define the terms supply, demand.	Dictionary	Definitions
	1.22 Explain how the price of a good or service is controlled by supply.	Reading	Bibliographic entries (see 1)
	1.23 Explain how the demand for a good or service controls the price.	Writing	Case studies (see 2)
	1.24 Demonstrate knowledge of how price changes affect supply and demand.	Listening	Complete sentences

Taxonomy

1.21 Definitions (Antell and Harris, Revised 1980, p. 11-12)

- Supply--amount of a good or service available for sale at a particular price.
- Demand--amount of a good or service that people will buy at a particular price.

1.22 The supply of a product is apt to control prices if there are no other factors to consider such as inflation or recession. A large supply of a product may cost less while with a small supply a product will cost more.

1.23 Demand for a product is apt to control prices if no outside factors enter the picture. A great demand for a product will increase the price. A small demand for a product will lower the price.

Suggested Learning Experience(s)

1. Collect newspaper articles which reflect the supply of a good or service. What are your predictions for the availability of the good or service. Summarize the information from the articles using correct bibliographic reference.
2. Imagine and write down a number of problems around the theme of supply and demand, e.g., you are the first to hear that sugar is in short supply. Record your immediate reactions to the problems. Share with the rest of the class. How does human behavior tie in with supply and demand.

Taxonomy

1.24 In 1.22 and 1.23 it is explained how supply and demand affect prices; however, at times prices change and the affect is now on supply and demand. If supply goes up, so do prices. If demand goes up, the prices drop. Although the laws of supply and demand seem difficult it is really nothing more than common sense. People will want to buy more if prices fall and buy less if prices rise.

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Suggested Learning Experience(s)

3. View filmstrips on supply and demand. Jot down key words and concepts from the filmstrip. Write in complete sentences.
4. Invite a utility company representative to speak about how utility rates are affected by supply and demand. Evaluate the speaker's presentation.

Specific Objective

1.3 The student will understand how consumer decisions influence the use of personal resources to maximize satisfaction.

Performance Indicator(s)

- 1.31 Identify personal resources.
- 1.32 Describe how a consumer strives for maximum satisfaction.
- 1.33 Describe how decision-making affects a life style.

Language Skill(s)

Reading and writing

Writing

Writing

Suggested Evaluation

Book report (see 1)

Story (see 3)

Thank you letter (see 4)

Taxonomy

1.31 One's own personal resources help in being a better consumer.

Personal resources include:

• Energy level	• Values
• Personality	• Skills
• Health	• Time
• Income	• Family
• Knowledge	

1.32 In the U.S. a consumer will strive for maximum satisfaction by taking part in the economic activities of the American market system. These activities are:

Suggested Learning Experiences

1. Find examples of non-fictional characters in literature who have an unusual amount of personal resources, e.g., Thomas Edison and his knowledge of electricity. Prepare a book report using correct bibliographic reference.
2. Brainstorm on the problems a consumer with the lack of personal resources will have. Discuss how the lack of one personal resource is compensated by an abundance of another.

Taxonomy

1.32 (cont.)

- Earning--essential to most consumers.
- Spending--earned income is used to spend on items which consumers want.
- Borrowing--most Americans borrow money at some time during their lives. It is usually paid back in installments.
- Saving--most people feel secure with part of their income saved.
- Investing--means one uses present income to add on to future income.
- Utilizing--an ongoing economic activity to which many consumers pay little attention. Utilizing one's time is essential for maximum satisfaction.

1.33 Some bases for decisions.

- Values, goals, needs, wants and resources form the bases. All are interrelated and interdependent.
- Values serve as a guide from which alternatives can be chosen.
- Goals are those things desired towards which energies are directed.
- All persons have similar basic needs, but when choices are made different life styles emerge.
- Individuals and families have different resources available to them.
- Good management of resources can increase satisfaction.

Suggested Learning Experiences

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3. Write a story of a modern teenager finding maximum satisfaction in his/her life by taking part in American economic activities.
4. Imagine you won \$1,000. Write a thank-you note to your benefactor explaining how you have decided to utilize the prize money, and how this will change your life from now on.
5. Apply the decision making process to the purchase of an item. Write a one page paper explaining what decisions you applied to the purchase of this item.

<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation</u>
1.5 The student will understand the interdependent nature of the market system.	1.51 Point out the characteristics of the market system. 1.52 Describe the factors which	Oral Writing	Interview (see 2) Lyrics (see 3)

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<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation</u>
1.5 (cont.)	control the interdependent nature of the market system.		

Taxonomy

1.51 A consumer citizen should understand that the following characteristics comprise the American market system.

- Private property--Americans have a right to own private and business property.
- Free enterprise--Americans have the right to produce and sell anything if it is not harmful to the public.
- Profit motivation--this characteristic produces the drive and energy which businessmen use in a free enterprise.
- Competition--businesses strive to be better. Consumers get quality because of competition.
- Supply and demand--there must be harmony between producers and consumers so the supply and demand are satisfied.

1.52 The interdependent nature of the market system works when the following ingredients are present.

- Resources--(Production) Because of resources consumers get what they want. Since resources are limited, there are priorities for allocating them. Supply and demand play an important role in allocating resources.
- Circular flow--(Production and Distribution) This reflects the interdependent nature between the consumer and business. Circular flow gets a

Suggested Learning Experience(s)

1. Write three well thought-out paragraphs stating which of the characteristics of the market system is most important to you.
2. Interview foreigners about their market systems. How does it compare with the American market system? Take written notes and report orally.
3. Make up lyrics to a popular song about circular flow.
4. By using guide for periodical literature, research what economists are saying about resource availability for the future.

Taxonomy

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1.52 (cont.)

product from the manufacturer to the consumer via business. A business needs the consumer to work; however, the consumer depends on business to hire him. A business needs consumers to buy and consumers need business to supply the goods and services. All parts of the circular flow continue to move simultaneously.

Suggested Learning Experience(s)

2. CREDIT

Goal: Understanding that credit properly used is a tool to reach economic goals.

<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation*</u>
2.1 The student will identify the role of credit in personal money management.	2.11 Define credit. 2.12 Identify who obtains credit and for what purposes. 2.13 Give an opinion if credit is good or bad.	Dictionary Verbal Writing	Definition Interview (see 2) Case studies (see 3)

* Check Suggested Learning Experiences column for numbers in parentheses.

Taxonomy

2.11 "Credit" means to trust someone.
2.12 Businesses borrow to acquire more capital. Governments borrow to fund national needs and to cover deficits. Consumers borrow to buy major articles, take advantage of sales, consolidate debts, level out monthly payments for necessary

Suggested Learning Experience(s)

1. Write a two page essay. Topic - "Using credit to purchase goods and services is a privilege."
2. Hold a class discussion on credit. Decide what it is, how it is obtained, how it is good when used properly and bad when

Taxonomy

2.12 (cont.)

goods or services or use as an emergency fund.
(Garman and Eckert, 1978, p. 195)

2.13 A student's opinion if credit is good or bad may be determined better by his/her knowledge of the advantages and disadvantages for the borrowers, savers and society as a whole. (Garman and Eckert, 1978, p. 195)

The borrower's advantages:

- shop without carrying much cash.
- act in an emergency when cash may not be available.
- use goods and benefit from services at same time that payments are made.
- consolidate costs of goods and services and therefore budget for them.
- make purchases when the price is right.

The borrower's disadvantages:

- tends to encourage overbuying.
- tends to reduce short-term buying power, since interest costs must be paid as well.
- decreases thrift and savings and makes it difficult for consumers to have cash for emergency expenses.
- obligations can result in bankruptcy if there is a sudden reduction of income.
- often reduces goal setting by families saving for the future.
- cost of goods and services is increased by finance charges, further reducing the consumer's cash balance.

Suggested Learning Experiences

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misused.

3. Interview people who use credit in their personal money management. Decide if they have a wise plan for using credit. Analyze results.
4. Develop case studies in which a decision to use credit must be made. Share case studies with rest of class. Tally the number who decide to use credit or cash.

2.13 (cont.)

- creates a false sense of security because of the possession of goods.

The saver's advantages:

- Can make money available for borrowers and thus benefit from the interest on their loans. In short, if it were not for the borrowers, the savers would have no place in which to invest savings.

Advantages and disadvantages for society as a whole:

Credit extension can lead to increased demand and therefore increased production of goods and services, thus helping to maintain full employment. On the other hand consumer credit may contribute to economic instability because it must take something away from investment spending or consumer spending on nondurable consumer goods and thus contributes to a lower rate of economic growth. The overextension of credit may also lead to inflation, extravagance and general lack of prudence. An increased demand for goods and services can pull up prices.

<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation</u>
2.2 The student will recognize types, sources and costs of credit for different purposes.	2.21 Define ten terms related to credit. 2.22 Demonstrate knowledge about three types of credit. 2.23 Describe four sources of cash loans.	Dictionary Writing Writing	Definitions Comic strip (see 1) Descriptive brochure (see 2)

<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation</u>
2.2 (cont.)	2.24 Decide on own use of credit.	Writing	Opinion summary (see 3)

Taxonomy

2.21 Terms related to types of credit:

Credit card--an identifying card which allows the holder to charge goods and services.Finance company--a company in the business of making loans.Installment credit--"closed end" type of credit arrangement in which the buyer agrees to make payments of a specified amount to be paid at a given time each month or week, for a given length of time.Liability--any obligation one must honor.Maturity date--the day the last payment in a credit contract is due.Non-installment credit--credit involving single payment transactions.Open account--payment made in thirty to ninety days.Open-end credit (revolving credit)--customer is provided with a "line of credit" up to a certain amount, usually with the privilege of repaying in full at the end of each billing period and avoiding finance charges.Optional charge account--a charge account combining features of regular and revolving charge accountsSuggested Learning Experience(s)

1. Develop a comic strip. Use your knowledge of the types and sources of credit to convey a message. Pay attention to grammar.
2. Imagine you have been hired by a bank to work in the public relations department. Your first task is to write descriptive brochures telling the public about the types of cash loans the bank offers. Compare brochures. Decide on the most descriptive.
3. Decide on an item which you want to buy. Develop a list of pros and cons whether you should pay cash or borrow. Which list carries more weight? Write a one page summary on your decision.
4. Search through newspapers and magazines for advertisements on credit. Classify them according to the type and source. Write a report on your findings.
5. Decide on the purchase of a large item (car, boat, house). Shop for credit being aware of different rates, terms and conditions. Write up findings in a report stating which credit terms you would use.

Taxonomy

Suggested Learning Experience(s)

allowing the consumer a choice of paying the full amount of the bill, or paying a portion of it and carrying the balance over to the next month.

Original balance--the amount of a debt before any payments are made.

Outstanding--obligation not yet paid.

Overdue--not paid by date payment is due.

Overextended--owes more than can pay.

Pledge--something of value given by a debtor to a creditor as security for payment of the debt.

Sales Finance Company--a business which purchases the accounts receivable of other businesses and then makes collection of the amounts due.

Savings and Loan Association--an institution set up to make loans, usually for the purchase or improvement of real estate, and to offer incentive to members for saving.

Secured loan--a loan for which the consumer puts up some form of security.

Short-term credit--credit repaid in a single transaction.

2.22 Types of credit

- Service credit. Doctor, dentist, plumber, etc.; Usually no cost when paid on time.
- Sales credit. From retail stores
 - regular charge account. Paid for in specified time and usually no charge.

Taxonomy

Suggested Learning Experiences

2.22(cont.)

- revolving credit. Given maximum amount can spend based on credit record. Monthly payments made on portion of outstanding debt with interest on unpaid balance.
- credit card account. Combine features of 30-day charge account and revolving account. No charge if paid within stated time. Must pay a portion of what is owed each month and a monthly service charge.
- installment account. Used for large purchases. A contract is signed on an agreement made for regular payments over a period of time. Down payment usually made at time of purchase. Payments include portion of outstanding balance, interest, and any other charges.

• Cash loans

- installment loan. Handled same as installment account.
- single-payment loan. Agree to pay back entire loan plus interest in one payment.

2.23 Sources of cash loans

- Banks and Savings and Loan Associations
- Finance Companies
- Credit Unions
- Life Insurance Carriers
- Pawnshops
- Illegal lenders

These sources differ in interest charged, amounts of money they will loan, the amount of security they require and the length of the repayment period.

2.23 (cont.)

Because of variations within each lending agency, cost differences should be dealt with at the time a loan is considered. This is shopping for credit.

2.24 Each situation where credit is considered should be viewed separately to determine (a) whether credit is actually desirable and (b) what the best source of credit may be.

Borrowing is a typical and essential activity in the American economy. It is important to know why, how and from whom consumers borrow.

<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation</u>
2.3 The student will understand the benefits of establishing a sound credit rating.	2.31 Define credit rating.	Dictionary	Definition
	2.32 Describe and interpret the Fair Credit Reporting Act.	Library	Article summaries (see 1)
	2.33 Explain the criteria used for granting credit including the point system and make conclusions concerning the maintainance of a good credit rating.	Oral	Literature example (see 2)
	2.34 Itemize the pros and cons of establishing a credit rating and defend a position.	Oral	Debate (see 3)

Taxonomy

2.31 A credit rating shows how one uses credit. It shows a "credit trust". Ratings for individuals are accumulated and provided by credit reporting agencies. Paying cash will not help a rating.

2.32 Fair Credit Reporting Act:
The name and address of an agency submitting a negative credit rating report must be given by anyone denying credit. The discredited person may then ask for the information the credit reporting agency has on file. If there is false information, the discredited person has the right to know who verified it and what was said. The original source can then be checked.

2.33 Criteria for granting credit:
 1. General behavior, attitude and personality of person
 2. Person's earning power
 3. Net worth of the individual
 4. Items of value the person can use as security

 The point system allots points for various criteria that tend to make for good credit-risk (e.g., occupation, job tenure, income, etc.).

2.34 One must understand what credit is, what it can and can't do, credit obligations and responsibilities. Only then can decisions be made concerning the use of credit and the desirability of establishing a good rating.

Suggested Learning Experience(s)

1. Search through recent periodical literature for articles relating to the Fair Credit Reporting Act. Summarize the articles and report to the class.
2. From literature give examples of characters who would have been credit worthy. Discuss the reasons why.
3. Debate, "Resolved: Americans can live without credit."
4. Imagine you are establishing a credit rating for a foreigner. How would you explain to the foreigner why a credit rating is needed.
5. Outline the steps needed to establish a good credit rating. Develop 2 complete paragraphs from your outline.
6. Invite a panel of guests from a credit investigation company, a bank and a financial loan company. Discuss how people are evaluated for credit. Students analyze and assess these sources in light of their own needs. Present conclusions in 3 well written paragraphs.

<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation</u>
2.4 The student will understand the use of credit in terms of present and future needs, wants, expenses and income.	2.41 Define debt limit. 2.42 Interpret debt limit for specific situations. 2.43 Specify debt limit you would assume personally given an income of \$10,000 (or some specific amount).	Dictionary Writing Oral	Definition Summary (see 1) Oral report (see 2)

Taxonomy

2.41 Debt limit--the amount of money one can borrow when present income and responsibilities are considered as well as future outlook. For instance a person with rising income might assume more debt than one who is planning to retire soon. One must consider the ability to handle an added expense in view of the present budget.

2.42 Some financial experts suggest a debt limit of 10-15 percent of your income after taxes. However, this is inaccurate in that many extraneous factors must be considered--age, future anticipated income, family size, financial obligations beyond those normal, etc.

2.43 Some fifty years ago, few people were willing to assume credit burdens. Credit, however, has become a way of life to varying degrees for different individuals. Each person should view his/her own situation and analyze his/her personal feelings about assuming debt. Only then can intelligent decisions be made concerning the amount of debt each individual can assume.

Suggested Learning Experience(s)

1. Students develop and write the problems related to the debt limit for a consumer in a specific situation. Other students find a solution to the problem and describe their reasons why in a well written summary.
2. Question friends and relatives about the debt limit they have accumulated. Report general impressions to the class.
3. Write an essay on the topic, "credit as the present use of future income."
4. Interpret Shakespeare's quotation in Hamlet, "Neither a borrower nor a lender be."

<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation</u>
2.5 The student will understand the decisions that come into play influencing borrowing.	2.51 Define borrowing, using examples of at least six possible loans. 2.52 List six consumer "do's" and six consumer "don'ts" concerned with credit.	Dictionary Writing	Definition Biography (see 1)

Taxonomy

2.51 Borrowing (or credit) is obtaining the means by which goods and services can be made available. With the move toward a cashless/checkless society the consumer can more and more simply "sign" when a purchase is made. This charge sales type of borrowing may now be added to the many other forms of borrowing which have previously existed. Among installment loans are those for automobiles, other durable consumer goods, repair and modernization and personal. Among the non-installment loans are single payment, charge accounts, revolving credit plans and service credit.

2.52 Some do's:

- know how payments will be met before signing a credit application.
- know how much you will have left after all of necessary expenses and payments are taken out.
- know what the cost of the credit will be.
- determine how much more the item will cost because of the credit.
- shop for the best credit arrangement.
- analyze the deal before you sign for it.

 Some don'ts:

- be pressured by a smooth talking salesman.

Suggested Learning Experience(s)

1. Write a short biography about a person who abuses credit.
2. Set up a "correct your credit" agency in class. Solve credit problems. Write an opinion essay from your experiences with the topic "The biggest credit problem is...."
3. Prepare bulletin boards which spell out consumer "do's and don'ts."
4. Personify a credit card. Students write short paragraphs about "Charlie Credit's Capers."
5. Analyze examples of credit contracts. Discuss which credit contract is the most easily understood.

2.52 (cont.)

- be pressured by the emotional pleas of a salesman.
- be stampeded into signing immediately to take advantage of a "hot deal".
- buy anything that you don't want just because it is cheap.
- make unnecessary changes. Buy from dealers with whom you have confidence.
- expect to erase debt by returning merchandise.
- buy something you don't need.
- sign something you have not read completely.
- sign something different from what salesman told you about.
- allow contracts to be "switched".

3. CONSUMER LAW/PROTECTION

<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation</u>
3.1 The student will be able to understand the basic elements of a contract: offer, acceptance and consideration and mutual agreement.	3.11 Define the elements of a contract.	Dictionary usage	Definitions

Taxonomy

3.11 There are four basic elements of a contract.

- Offer--When a buyer states what he is willing to make available to pursue the contract.

Suggested Learning Experience(s)

1. Write complete sentences for the elements of a contract.
2. Review various contracts. Rewrite them

Taxonomy

3.11 (cont.)

- Acceptance--With an acceptance of an offer two parties become legally bound.
- Consideration--A promise given by one for the promise of another.
- Mutual agreement--A contract which is properly executed and legally binding.

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Suggested Learning Experience(s)

to be more clear and understandable.

3. Write a letter to a retailer stating you have a problem with the contract which was offered. Develop your first draft using the word "is" in every sentence. Then, rewrite the letter eliminating the word "is" to emphasize how much more effective written communication can be without the word "is."

Specific Objective

3.2 The student will understand the need for social controls, e.g., warranties and consumer laws, relative to consumer credit, deceptive trade practices, truth-in-lending and debt collections.

Performance Indicator(s)

3.21 Explain 3 reasons for social controls.

Language Skill(s)

Library skills

Suggested Evaluation*

Summary Report (see 4)

* Check suggested learning experiences for numbers in parentheses.

Taxonomy

3.21 Social controls are geared to help the consumer. Consumer laws and protection agencies are direct social controls; however, a warranty, a traffic light, spaces for handicap parking are also forms

Suggested Learning Experience(s)

1. List consumer protection agencies in your local area. Stress capitalization and correct spelling while preparing the list.

Taxonomy

3.21 (cont.)

of social control. Reasons for having social controls are to

- help the financially disadvantaged, the handicapped and the misinformed.
- make an attempt to gain more quality over quantity in one's life.
- make it easier to fight for consumer rights:
 - the right to choose
 - the right to be informed
 - the right to be heard
 - the right to safety
 - the right to act
- Provide for individual economic growth and a higher level of living.

Suggested Learning Experience(s)

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2. Telephone a consumer protection agency with a complaint. Report on the advice you received in writing paying attention to using quotations.
3. Use the Reader's Guide to Periodical Literature to find articles on social controls for the consumer.
4. Summarize reports from Reader's Guide in one well-written paragraph.
5. Write a letter of complaint to a company on a defective product or an unacceptable service.

Specific Objective

3.3 The student will become acquainted with agencies of protection from fraudulent consumer schemes.

Performance Indicator(s)

- 3.31 List 10 Consumer Protection Agencies.
- 3.32 Identify consumer protection agencies which help with contract problems.

Language Skill(s)

Grammar

Reading and writing

Suggested Evaluation

List (stress on capitalization)

Development of Brochure (see 1)

Taxonomy

3.31 Because of the length, each consumer agency cannot be discussed here. It is suggested that the Consumer's Resource Handbook be obtained from the Consumer Information Center, Dept. 532 G., Pueblo, Colorado 81009.

Suggested Learning Experience(s)

1. Students prepare a brochure to introduce consumer protection agencies eliminating specific names. Students guess what agency has been described from the information in the brochure.

3.31 (cont.)

Some federal government agencies which help protect the consumer are:

- Dept. of Agriculture
- Dept. of Commerce (National Bureau of Standards, Office of Technical Services, Patent Office, Office of Business Economics, Weather Bureau, Bureau of Public Roads)
- Dept. of Health and Human Services
- Dept. of Justice
- Dept. of Labor (Bureau of Labor Statistics)
- Post Office Dept.
- Treasure Dept. (Comptroller of the Currency Coast Guard)
- Civil Aeronautics Board, CAB
- Federal Aviation Agency, FAA
- Federal Communications Commission, FCC
- Federal Power Commission, FCC
- Federal Reserve Board, FRB
- Federal Trade Commission, FTC
- Department of Housing and Urban Development, HUD
- Interstate Commerce Commission, ICC
- Consumer Advisory Council, CAC
- Dept. of Education (Office of Consumer Education)
- U.S. Office of Consumer Affairs

3.32 Consumer protection agencies (contract problem):

- Attorney General's Office
- Medicard Fraud Unit
- Dept. of Consumer Affairs
- Better Business Bureau
- Local Postal Inspector

Specific ObjectivePerformance Indicator(s)Language Skill(s)Suggested Evaluation

3.4 The consumer will become acquainted with

3.41 List 4 contract problems.

Writing and Verbal

Opinion paragraphs (see 1)

<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation</u>
3.4 (cont.) consumer remedies for contract and tort problems.	3.42 Explain how to avoid contract problems. 3.43 Give information about 10 consumer laws.	Listening Writing	Interpretation of a sales pitch (see 2) Questionnaire (see 3)

Taxonomy

3.41 Contract problems are as varied as contracts themselves. Problems exist if the contract:

- Is unconscionable and unfair. An unsuitable contract in which one of the parties feels cheated is unconscionable.
- Includes a confession of judgment. This clause excludes the right of a consumer to seek legal help if a problem arises with the contract.
- Has an add-on clause. In a repossession case the creditor may take items owned by the consumer if they were purchased at his place of business.
- Excludes necessary provisions. When one buys a home there are many provisions which should be written into the purchase contract. Some include
 - Being able to cancel a purchase contract. If financing can not be obtained you may want to cancel.
 - Being able to apply the earnest money (money you gave to the seller with the purchase contract) to the down payment.
 - Get the earnest money back if the buyer can not get financing.
 - Getting a clear title to the land and buildings provided by the seller.

Suggested Learning Experience(s)

1. In 3 complete paragraphs express your opinion about a person who tries to pressure you into signing a contract.
2. Listen to a salesman sell an item and offer you a contract. As a listening exercise repeat what you think the salesman said. Discuss ways in which you can listen to a long talk effectively.
3. Develop a questionnaire for parents and faculty on their knowledge of consumer laws. Tabulate results and publish.

3.41 (cont.)

- Identifying and making arrangements to have repairs done.
- Identifying everything which stays in the home.
- Stating the closing date.
- Works around the cooling-off period. Any contract signed without a previous appointment is allowed a 3-day cooling-off period in which time the contract can be cancelled. A door to door salesperson selling books may attempt to make an appointment to come back later. He is in effect cancelling the consumer's cooling-off clause.
- Is noncancelable.
- In the case of health insurance excludes a guaranteed renewable and/or noncancelable clause.
- Is forced on you with such statements as,
 - "It's just an ordinary contract. Don't bother to read it all."
 - "Let's save time. I know you are in a hurry, so sign here and I will fill in the rest."
 - "Sign now and the price is reduced. Don't wait until tomorrow because the price will be higher."

3.42 To avoid contract problems

- Always ask questions if you don't understand the language.
- Get help from a lawyer or the legal aid society if more explanation is needed.
- Read and completely understand the contract terms before signing.

Taxonomy

Suggested Learning Experience(s)

3.42 (cont.)

- Check that all blank spaces are filled in before signing.
- Do not rush.
- Do not let your emotions take over your common sense and better judgment.

3.43 Same Consumer Laws. A general consumer education text will explain these in detail.

Credit:

- Truth in Lending Law
- Fair Credit Reporting Act
- Equal Credit Opportunity Act
- Fair Debt Collection Practices Act

Food:

- Fair Packaging and Labeling Act
- Wholesome Meat Act
- Wholesome Poultry Act
- Food Additives Amendment
- Nutritional Labeling Regulations

Clothing:

- Wheeler-Lea Act
- Wool Products Labeling Act
- Fur Products Labeling Act
- Flammable Fabrics Act
- Textile Fiber Products Identification Act
- Trade Regulation Rule

Health:

- Occupational Safety and Health Act
- Poison Prevention Packaging Act
- Federal Hazardous Substances Act
- Noise Control Act
- Cosmetic Labeling Ruling

Taxonomy

3.43. (cont.)

Housing:

- Home Mortgage Disclosure
- Privacy Act
- Auto Recall Repair Law
- Energy Policy and Conservation Act

Suggested Learning Experience(s)

<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation</u>
3.5 The student will be able to define related terms including the following: collateral, conditional, default, declining balance, promissory note, installment buying and repossession.	3.51 Define 10 vocabulary words related to consumer law and protection.	Dictionary	Definitions

Taxonomy

3.51 There are many relevant words to include in the list. Add words other than the following which are pertinent to your study.

Contract--An agreement legally enforceable between two or more persons.

Cancel--To make void or invalid.

Agency--An establishment for executing business in behalf of others.

Suggested Learning Experience(s)

1. Students list words related to consumer law and protection. Use the words from the list to recognize prefixes and suffixes. How do the words change their meanings with the prefixes and suffixes.
2. Write a short script using words pertinent to consumer law and protection. Perform the script for a suitable audience.
3. Write a humorous story which incorporates consumer laws and protection terms.

Taxonomy

Suggested Learning Experience(s)

3.51 (cont.)

Collateral--Security which is pledged to make sure that a contract is fulfilled.

Conditional--A term which expresses certain methods in which a loan or contract will be legal.

Default--A failure to pay financial debts.

Promissory note--A promise to pay at a fixed time a certain amount.

Repossession--To possess again.

Competition--When business firms rival for profit.

Ombudsman--An official representing the government who investigates consumers' complaints against the government.

Declining balance--As the consumer pays on a loan the principal amount decreases.

Installment buying--Refers to a type of credit plan whereby the consumer pays a specific amount at a certain time of the month or week for a given number of months. The consumer signs a contract to enter into an installment buying plan.

4. BANKING SKILLS (CHECKING AND SAVINGS ACCOUNTS)

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Goal: Understand the role of banking and lending institutions as the bridge between savers and borrowers, those paying and those saving money.

<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation*</u>
4.5 The student will know how to develop a sound savings plan.	4.51 Describe what is meant by, "Money makes money and the money that money makes makes more money." (Benjamin Franklin. <u>Poor Richard's Almanac.</u>)	Writing	Essay (see 1)

* See Suggested Learning Experience column for numbers in parentheses.

Taxonomy

4.51 People invest money. Money well invested produces a profit. The reinvested profit makes a greater profit, etc.

Suggested Learning Experience(s)

1. Write a brief essay interpreting the quotation, "Money makes money and the money that money makes makes more money."

5. COMPARISON SHOPPING FOR GOODS AND SERVICES

Goal: Developing the skills, understandings and techniques of sound shopping habits for goods and services.

<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation*</u>
5.1 The student will be able to differentiate between impulse buying and comparison shopping.	5.11 Define impulse buying. 5.12 Define comparison shopping.	Dictionary usage	Definition

<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation*</u>
5.1 (cont.)	5.13 Give 4 ways to comparison shop.	Writing skills	Personal letter (see 4)
	5.14 Demonstrate 4 ways to avoid buying a necessity, such as food, on impulse.	Listening skills	Interview (see 6)

* Check Suggested Learning Experiences column for numbers in parentheses.

Taxonomy

5.11 Impulse buying--Buy on the spur of the moment without reference to any plan or search.

5.12 Comparison shopping--Purchase is made only after analysis of need and comparisons of quality and cost in relation to need.

5.13 When you want to compare products and their prices ask some of these questions first:

- Who makes the product available? If you know a retailer, comparison shopping can be easier.
- What do I want to buy? Be specific. Know what features, options or extras you will consider. It makes a difference in your final analysis.
- Where is the product located? Vacuum cleaners located 50 miles from you, but advertised at \$10 less, may not be a good purchase because of transportation cost.

Suggested Learning Experience(s)

1. Look up antonyms and synonyms for the words impulse and comparison. Write in complete sentences.
2. Students give a short speech on an item purchased on impulse. Class suggest ways the student could have done comparison shopping instead of impulse buying.
3. Read the following poem and comment on whether the people described are impulse buyers or comparison shoppers.

Money - author unknown
 Workers earn it,
 Spend thrifit burn it,
 Bankers lend it,
 Women spend it,
 Forgers fake it,
 Taxes take it,
 Dying leave it,
 Heirs receive it,
 Thrifit save it,

Taxonomy

5.13 (cont.)

- Why do I need the product? In many cases a product that is needed will receive better comparison shopping attention.
- When will I buy the product? Perhaps a 2 month wait will mean a savings. Check with a retailer to determine the best time to buy a product.

5.14 Guidelines to avoid buying a necessity, such as food, on impulse:

- Plan your menus in advance.
- Use a shopping list.
- Buy or shop after a meal or when you are not hungry.
- Understand the psychology of a supermarket. Items are strategically placed to get you to buy more.
- Establish a food budget. If you don't have the money you won't spend it.
- Shop alone.
- Never feel hurried in line or in the aisle.

Suggested Learning Experience(s)

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Misers crave it,
Robbers seize it,
Rich increase it,
Gamblers lose it,
I could use it.

4. Write a letter to a relative telling how and why you finally decided to buy a particular product. Use correct letter form.
5. Make up questions about your own spending habits. For example, on what do you spend most of your money? How often do you buy on impulse? Answer in complete sentences.
6. Invite food shoppers to speak about their buying habits in the supermarket. Students interview the speakers to determine their good and bad shopping habits.

<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation</u>
5.2 The student will understand the basic provisions and responsibilities contained in warranties and guarantees.	5.21 Define warranty. 5.22 State the difference between warranty and guarantee. 5.23 List and define key words which appear in warranties and guarantees.	Dictionary Reading Dictionary	Definition Completion test Word usage

<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation</u>
5.2 (cont.)			
	5.24 Explain and describe the 2 types of warranties and their purposes.	Oral	Game responses (see 7)
	5.25 Outline consumers' responsibilities in using warranties.	Writing	Essay questions
	5.26 Point out a course of action if warranties cause a problem.	Writing and oral	Mock action line (see 6)

Taxonomy

5.21 Warranty is defined as "a legal agreement whereby a seller or manufacturer guarantees the performance and quality of items offered for sale."

5.22 Although both terms are used interchangeably there is a slight difference in the warranty and guarantee. Replacement of parts is offered by a warranty. Replacement of parts and labor is offered by a guarantee.

5.23 As of 1975 recent legislation from the Magnuson-Moss Warranty Act requires that the words used in a warranty be clear and well understood. Some key words found in warranties are:

• warrants	• affixing
• defects	• attachment
• materials	• void
• workmanship	• consequential
• replace	• authorized
• defective	• legal rights

Suggested Learning Experience(s)

1. Obtain warranties and read through them. Select all the verbs and change from the active to the passive voice.
2. List provisions stated in a warranty. Use a dictionary to define words you do not understand.
3. Rewrite warranties which are not satisfactory or could be improved.
4. Discuss "If a guarantee reads, 'satisfaction or your money back,' what responsibility does the consumer have?" Write results of discussion.
5. Review guarantees before 1975 and those after 1975. List the differences in grammar.
6. Solve warranty and guarantee problems through an action line in class. An

Taxonomy5.24 Types of warranties:

- Implied--A consumer has the right to expect that his purchase will do what it implies. A vacuum cleaner should vacuum.
- Express--The consumer is promised the product will perform to a certain standard. An express warranty usually includes parts replacement for a specific time.

Purposes of warranties:

- Full warranty--Covers all parts, installation costs and for all who own the product.
- Limited warranty--Covers only a portion of the product, for example, parts but not labor.

5.25 A consumer has some responsibility in using warranties. He must

- Fill in proper information on supplied forms.
- Mail forms when necessary.
- Understand if it is a full or limited warranty.
- Keep it on file or have it easily accessible.
- Use the warranty when the need arises.

5.26 If a warranty causes a problem for a consumer he should

- Read it well to understand his rights.
- Get in touch with the proper person to hear the complaint.
- Contact any local consumer bureau to gain insight into a buyer's rights.
- Use a small claims court to settle the dispute.
- File a lawsuit if the need arises.

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Suggested Learning Experience(s)

action line welcomes consumer problems. The personnel investigate the complaint and find the appropriate solution.

7. Divide students into two groups. Ask questions about types and purposes of warranties. The objective for each group is to answer most questions correctly.

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Taxonomy

5.26 (cont.)

- Contact the Federal Trade Commission to report violations.

Suggested Learning Experience(s)

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<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation</u>
5.3 The student will be able to identify the different methods used by producers and retailers to alert them to comparative value, e.g., unit pricing, labeling, advertising, store brands, sales, etc.	5.31 Point out the competitive sources most often used by retailers to attract business. 5.32 Itemize the pros and cons of the competitive sources which retailers use.	Listening Oral	Advertising listening exercises (see 1) Auction (see 2)

TaxonomySuggested Learning Experience(s)

5.31 Retailers and the advertising agencies are constantly thinking of a better and a different way to attract customers. Some methods used are: • Trading stamps • Sales • Contests • Coupons • Give-aways • Non-advertised specials • Midnight sales • Buy one and get one free Consumers may use other, less glamorous methods to make comparisons, such as, unit pricing, label information, no name brands and store brands.	1. Listen to advertising on the radio. Write 5-10 key words you remember. What type of retail outlet is providing the advertising? What factors would make you decide to shop at a particular retail outlet? 2. Plan an auction. Use sales gimmicks retailers employ to help sell an item. Analyze which sales gimmick was most popular. Which sold most items? 3. Visit a supermarket. Compare one or two products by their unit prices. Which is the best buy?
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TaxonomySuggested Learning Experience(s)

5.32	<u>Pros</u>	<u>Cons</u>
Trading Stamps	Can trade them for an item you desire.	Food may be more expensive. You may not care to trade them. You may throw them out.
Sales	Items are less expensive. You can plan menus around items on sale.	You may not need the items on sale. Non-food items on sale, e.g., shampoo, may still be more expensive in a grocery store.
Contests	You may win!	Taxes must be paid by the recipient. The more participants the less chance of you winning. Gimmick-If a bicycle is a contest prize, it may be a gimmick to get you to buy one.
Coupons	Can be used to save money.	Coupons may be for items you rarely or never use, and the coupon item may still be more expensive than another brand, even though there is no coupon for the second brand.
China give away	A gradual way to build up a set.	Must spend a certain amount of money to get a place setting. China quality questionable. China may not match with present set.

TaxonomySuggested Learning Experience(s)

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5.32(cont.)

	Pros	Cons
Non-advertised specials	Saves you money.	May pick up an item you did not intend to get.
Mid-night sales	Saves you money.	You must be in the store at midnight!
Buy one and get one free	Good way to stock up.	Beware that the price of one has not raised. You may want only one or none!

<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation</u>
5.4 The student will identify the different types of retail outlets available for consumers.	5.41 Identify 5 types of retail outlets. 5.42 Explain the factors to consider when selecting an outlet or a place to buy. 5.43 Predict how future retail outlets may differ.	Writing	Interrogative statements (see 2) Concise paragraph (see 3) Poem (see 4)

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Taxonomy

5.41 Types of Retail Outlets:

- Department store
- Chain store
- Discount store
- Door-to-door salesman
- Speciality shop
- Variety store
- Wholesale stores
- Catalogue showrooms
- Manufacturers' outlets
- Vending machines

5.42 Factors affecting choice of outlet

- Income
- Health
- Age
- Personal values
- Time
- Life style
- The outlet's location, layout and atmosphere
- Available transportation, public or private

5.43 One's imagination about the future retail outlets could be positive or negative. They may differ by:

- Offering more services
- Computerizing every purchase to aid in inventory control
- Offering day care services
- Offering playgrounds
- Providing secluded areas for relaxation (soft cushions, music)

Suggested Learning Experience(s)

1. Students write an opinion essay on the type of retail outlet in which they would rather shop for a sweater.
2. Write and answer 5-10 questions a foreigner might ask regarding the types of retail outlets in the United States.
3. Divide your city or town into sections. Search out what kinds of retail outlets are in each section. Write a clear, concise paragraph stating why you would shop in one section of town in preference to the others.
4. From an artist's view of what a retail outlet will look like 50 years from now, write a poem or draw a picture.

<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation</u>
5.5 The student will apply the techniques of comparative shopping when selecting services, e.g., insurance, health services, credit, recreation, etc.	5.51 Explain how to comparison shop for professional services.	Writing	Character sketches (see 1)

Taxonomy

5.51 These 6 considerations should be thought through in selecting a professional service (doctor, dentist, lawyer)

- Check the professional's credentials through local medical, dental or bar associations.
- When it is not an emergency, establish a relationship with the professional.
- Discuss fees and methods of payment ahead of time.
- Ask neighbors or friends if they know or have heard about the professional's reputation.
- Ask yourself if you have a high regard and trust for the professional you wish to hire.
- Do you get suitable answers to questions?

Suggested Learning Experience(s)

1. From literature you have read write a character sketch of a doctor, lawyer, dentist, etc. Would you like to hire this individual?
2. Interview parents, friends, neighbors to determine how they pick a professional for service.

6. ADVERTISING AND OUR SOCIETY

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Goal: The student will be able to recognize and discriminate between informational advertising, selling aids, and motivators which meet the needs, wants and interests of the consumer.

<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation*</u>
6.1 Students will gain an understanding of the purposes and techniques of advertising.	6.11 List 3 reasons for advertising. 6.12 Determine 3 techniques of advertising.	Writing Grammar skills	Summarize reference (see 1) List descriptive adjectives

* Check Suggested Learning Experiences column for numbers in parentheses.

Taxonomy

6.11 Reasons for advertising:

- Inform you about new products.
- Tell you the price of a product.
- Describe product features.
- Make a product easily available.
- Sell you something.
- Make the product competitive.
- Build a favorable image of the product.
- Maintain customers.
- Build a greater customer base.

6.12 Techniques of advertising are used through the mass media, brochures, direct mail.

Descriptive advertising techniques include:

- Bait and switch--This occurs when an item is advertised at a low price. When a customer shows interest in buying the low priced item he is told it is inferior or not avail-

Suggested Learning Experience(s)

1. Students analyze the techniques of advertising used in popular magazines, radio and television.
2. Write personification essays using techniques of deceptive advertising to personify. Read the essay and let class guess what technique is personified.
3. Write a letter to the editor about deceptive advertising techniques in the marketplace.
4. Write an opinion essay with 3 well thought out paragraphs. Topics of essay: My Life Would Be Better Without Advertising.
5. View filmstrips or films on advertising purposes and techniques. Compile a list

6.12 (cont.)

Suggested Learning Experience(s)

able. The "switch" results when the salesman tries to sell the customer a "higher priced" item.

- Deceptive Pricing--Occurs when the original price is increased to make the sale price better.
 - Formerly \$30.00 now \$17.50
 - Retail price \$25.00, my price \$13.95
 - Comparable value \$10.00
 - Suggested list prices when used to make comparisons
 - Two for the price of one sale when the cost of one item pays for the two
- Easy credit advertising--It is usually the individual least able to purchase an item who gets taken by easy credit advertising since the individual's ability to pay is rarely checked. The high risk credit is subject to the same terms as the low risk credit. Consequences and chances of missed payments and finance charges are great with easy credit advertising.
- False testimonials as endorsements--Most retailers desire famous people, animals or items to be associated with their products. Stating or implying that someone endorses a product or part of a product is illegal without proper consent. A consumer must watch for phrases such as "Award winner", "blue-ribbon item" or "prize-winner" when no contest or competition exists.
- Foreign origin--A consumer should see the country of origin on the product and the package. Not all wines and perfumes come from France. Not all oriental rugs are Persian.

6.12 (cont.)

- Free estimate not free--Hidden charges not revealed to a customer prior to consenting to have work done is an example of a free estimate which is not free.
- Free goods--A consumer must be absolutely sure there are no strings attached where a product is advertised as free. It is the responsibility of the advertiser not to increase the price of other products to be sold when the free item is claimed. The quality of a free item must remain the same.
- Final sales--The idea of a final sale is no refund, no exchange. A retailer must state the conditions of a final sale if there are to be no refunds.
- Substitution of goods--It is deceptive to substitute an item believed to be another item purchased by the customer.

<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation</u>
6.2 Students will be able to identify consumer needs, wants and interests based on values.	6.21 Identify the differences among basic consumer needs, wants and interests. 6.22 Determine 3 factors which relate advertising with the consumer. 6.23 Describe 3 factors which cause value differences among consumers.	Verbal communication Writing Verbal	Game, "I couldn't live without..." TV Report (see 8) Ethnic fair (see 7)

<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation</u>
	6.24 Describe and interpret regulations concerning advertising.	Library research	Research report (see 6)
	6.25 Give 3 conditions by which advertising can help a consumer make intelligent purchases.	Oral and written	Survey (see 9)

Taxonomy

6.21 Basic human needs can be better understood by reviewing Maslow's Hierarchy of Needs.

Maslow (Motivation and Personality, 1954) states that man has a pressure within him to press toward a fuller and fuller being. This means pressing toward what most people would call good values, toward serenity, kindness, courage, knowledge, honesty, love, unselfishness, and goodness. Categories of needs are identified which are placed in a hierarchy, which is an arrangement of stages or steps, each higher than the preceding one.

Higher	Aesthetic
:	Self-actualization
:	Esteem
:	Love and belonging
:	Safety
Lower	Physiological

Maslow believed that one would not be seeking to self-actualize (realize highest potentials) while living in hunger or fear. In other words, lower needs such as physiological and safety needs must be met before higher ones could come into play.

Suggested Learning Experience(s)

1. Play the game, "I couldn't live without..." to determine if the item named is a need, want or interest.
2. Read poems which reflect human needs, such as "Birches" by Robert Frost, "Ozymandias" by Percy Shelley, "A Noiseless, Patient Spider" by Walt Whitman.
3. Select classic characters from literature. Study how these characters satisfied their needs, wants and interest.
4. Write an essay on the topic, "How you spend money is an expression of your values." Concentrate on punctuation.
5. Invite people of different ages to talk to the class about their values. Make this a listening assignment. Students take notes and compare what they heard.
6. Research through periodical literature in the library advertisements used in the 1950's, 1960's and 1970's. Draw some conclusions about societies' values, about

Taxonomy

6.21 (cont.)

Examples of basic consumer needs are shelter, clothing and food.

Examples of basic consumer wants are a nice home, nourishing and interesting food and attractive clothing.

Examples of consumer interests are decorating the home, sewing clothing and gourmet cooking.

6.22 Factors which link the consumer with advertising are:

- Mass media--few forms of mass media are not supported by advertising sponsors.
- Standard of living--It is raised by the advertisements bombarding a consumer's life.
- Credit card--Society allows easy access to goods and services and tempts advertisers to plug even harder.
- Competition--When used among businesses it means advertising will again be used to attempt to get the consumer to buy Brand X over Brand Y.

6.23 Value differences among consumers will be reflected by:

- Ethnic background. Each culture has different values.
- Environment. Different values will be reflected from an individual's environment: city, urban, suburban, small town, rural, north, south, east or west.

Suggested Learning Experience(s)

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consumers' values, about families' values. What regulated advertising in the 50's, 60's, 70's?

7. Sponsor an ethnic fair with the sole purpose of gaining knowledge and understanding about the values of other cultures.
8. Invite an advertising expert to explain how advertising relates closely to the consumer way of life in the United States. As a TV reporter what would you write in a one minute report on the expert's speech?
9. Survey the faculty to determine how they use advertising to buy clothes. Tabulate results.
10. After watching a current movie, TV program or play, examine it for values. Write a short essay on the values held by one of the personalities.
11. Ask the librarian to help you in selecting a book about a famous person who has impressed you, e.g., The Diary of a Young Girl by Anne Frank. Write an essay on the values you feel that person held. Where did the values originate? How do the values reflect his or her life style?
12. Watch TV shows at different times of the day. List the ads shown. Determine what sex, age, social and economic groups the

Taxonomy

6.23 (cont.)

- Religious beliefs. Protestant, Catholic, Jewish and other religions play major parts in shaping values.

6.24 Regulations concerning advertising rest with the Federal Trade Commission. The FTC oversees advertising to make sure it is reliable and acceptable. The Unfair Trade Practices and Consumer Protection Law developed by the FTC has been adopted by individual states. It gives the state attorney general power to curb deceptive advertising. Businessmen and advertisers now realize that they must raise their standards and watch for deceptive advertising. The National Agencies and the Association of National Advertisers have set standards. In recent years, radio, newspapers, magazines and TV stations have added consumer hotline programs which help consumers stay informed.

6.25 Advertising can help a consumer's spending if the consumer:

- Has a spending plan.
- Seeks necessary information from advertising.
- Compares and contrasts the advertising information.
- Does not allow emotions or ego to play a part in spending.
- Does not buy on impulse.

Suggested Learning Experience(s)

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ads are appealing to. What is your opinion of certain shows and the ads which are used?

NOTE: The one performance indicator in this section combines specific objectives 6.3, 6.4 and 6.5. The objectives have all been listed to correspond with the Rhode Island Consumer Education Guide.

<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation</u>
6.3 Students will be able to recognize and categorize emotional appeals in advertising.	6.31 Discriminate among advertising techniques as a matter of accurate reading.	Reading	One sentence message (see 3)
6.4 Students will be able to identify and classify motivational techniques in advertising.			
6.5 Students will be able to identify propaganda techniques used in advertising in all types of media.			

Taxonomy

6.31 Advertisers want one thing - to sell a product or service. The information relayed through the words needs careful attention. Some questions a student can ask as he reads through an advertisement are:

- What is the advertisement saying?
- How is the advertisement appealing to me? Through color, images, language, association?
- Is there any significant information in the advertised message?
- Do I accept or reject the information written in this advertisement?
- Because of the written message will I decide to buy this product?

Suggested Learning Experience(s)

1. Collect ads from magazines, newspapers, brochures. Read through them eliminating all descriptive adjectives. Does the advertisement have the same appeal with only nouns and verbs?
2. Debate, "Resolved that advertising should use less emotional appeal."
3. After blocking out all the words in an advertisement show the picture to the class. In one sentence write the message which the picture conveys.

<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation</u>
6.6 Students will be able to identify informational sources of advertising, e.g., classified ads, periodicals, educational materials from business, industry, and professional organizations.	6.61 Identify 3 informational sources of advertising.	Grammar	Informational advertisement (see 1)

Taxonomy

6.61 Some of the most popular forms of informational advertising are:

- Classified ads
- Magazines
- Educational materials from business, professional organizations and industry.
- Direct mail
- Bill boards
- Posters
- Leaflets, brochures, pamphlets
- Mass media: radio, TV, newspapers

Suggested Learning Experience(s)

1. Pretend you are a retailer of a popular T-shirt shop. What forms of educational-informational advertising would you use? Write an ad using correct spelling and punctuation.
2. Secure issues of magazines, for example, Time, Fortune, Better Homes and Gardens, Today's Education. Review the advertisements. Is there a difference in the informational advertising used in each type of magazine? Discuss.

7. RESPONSIBLE BUDGETING

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Goal: Developing the ability and concept of personal budgeting to satisfy the wants and needs of groups and individuals.

<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation*</u>
7.5 Be aware of the need for flexible budgeting due to changes in the economy, personal life style and family.	7.51 Compare the concepts "budget" and "flexible budget."	Writing	Bibliographic entry (see 2)

* Check Suggested Learning Experience column for numbers in parentheses.

Taxonomy

7.51 A "budget" follows rigid rules for allocating money to different channels. Little to no variation occurs. A "flexible budget" allows greater variation in how the money will be spent. In both cases the consumer spends according to the budget which he planned to best suit his needs.

Suggested Learning Experience(s)

1. Discuss the concept of "robbing Peter to pay Paul" as flexible budgeting. Write conclusion in a one page summary.
2. Find an article in a magazine or newspaper concerning a person or family who might be better off had they had a budget. Write this information on a 3" x 5" card providing correct bibliographic reference. Analyze the material presented in the article.

8. INSURANCE

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Goal: Understanding the role of insurance in maintaining personal and family security.

<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation*</u>
8.1 The student will understand the underlying principles of insurance.	8.11 Define insurance. 8.12 Give 3 principles of insurance.	Dictionary Writing	Definition Questionnaire (see 2)

* Check Suggested Learning Experiences column for number in parentheses.

Taxonomy

8.11 Insurance is a way of reducing anxiety by sharing risks. Insurance companies operate by collecting small amounts of money from individuals. When someone suffers a loss, payment is made from the amounts of money collected. Insurance companies count on the fact that not everyone will suffer a loss at the same time.

8.12 Principles of insurance:

- Individual can feel more secure in a society where perils are ever present.
- Money is provided for beneficiaries.
- In a debt society it allows survivors to clear the debt left by the deceased.
- Insurance can be used as a means for borrowing money.
- The individual is forced to understand his current financial position and to realize the maximum potential loss if death occurred.

Suggested Learning Experience(s)

1. View Traveler's Life Insurance films, Widow and From the Judge's Bench. Both show the need for insurance in a debt society. Listen for key ideas. Outline what was heard. Compare outlines. (See audio visual resources)
2. Develop a questionnaire to survey the area's insurance companies. What needs are being served?
3. Imagine that two people in class have had a car accident - one with insurance and one without. Discuss the losses, gains and alternatives in each situation.

<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation</u>
8.4 The student will understand the relationships between changing financial status and need for insurance coverage.	8.41 Explain the need for additional insurance protection as one's income increases.	Verbal	Panel Discussion (see 1)

Taxonomy

8.41 When income increases more insurance protection is usually needed because:

- More debt may be assumed.
- More valuable goods may be attained.
- Should a catastrophe occur the potential loss would be greater.

Suggested Learning Experience(s)

1. Invite speakers to class to discuss their insurance needs and how they are taking care of these needs. Follow with panel discussion, "Everyone needs some form of insurance."
2. Ask an insurance agent to compare insurance needs of a low, middle and high income family. In a short complete paragraph write if you agree or disagree with the agent. Be sure all written form is correct.
3. Analyze your own or your family's insurance needs. Discuss with parents and decide if an appointment with an insurance agent is important.

<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation</u>
8.5 The student will develop an understanding of the vocabulary and language of insurance agreements.	8.51 Define 10 words related to insurance. 8.52 Demonstrate the ability to interpret the language of insurance agreements.	Dictionary Reading	Definition Interpretation of written paragraphs (see 5)

Taxonomy

8.51 Words closely related to insurance.

- Insured--the person who is being insured, many times the major money earner.
- Cash value--what a policy is worth as a result of payment of premiums. The longer you own a policy the greater the cash value.
- Beneficiary--the individual named to receive insurance money when a death occurs.
- Owner--the person who buys the policy.
- Policy--the word used for an insurance contract.
- Face value--the amount of money which a policy is worth when death occurs.
- Premium--the dollar amount paid to an insurance company for protection.
- Dividend--refund made to a policyholder from insurance company profits.
- Options--extra considerations which must be written into a policy if the insured so desires.
- Coverage--refers to the amount of protection.
- Benefit--refers to the amount of money the beneficiary will receive.
- Renewable--to make a policy non-cancelable.
- Assets--one's total worth and an important consideration when attempting to determine insurance needs.

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Suggested Learning Experience(s)

1. Obtain insurance policies and develop lists of vocabulary words peculiar to the policy. Define and compare the list with other class members. Write the words in complete sentences paying attention to spelling and punctuation.
2. Develop a crossword puzzle using key words from insurance agreements. Complete.
3. Develop a list of antonyms from key words used in insurance policies.
4. Rewrite an entire insurance policy using ordinary vocabulary for the nouns and verbs.
5. Read through insurance policies. Identify the types of sentences used in the policy. Interpret the policy.

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TaxonomySuggested Learning Experience(s)

8.51(cont.)

- Liabilities--one's total debt and an important consideration when attempting to determine insurance needs.
- Surrender--term used to end the policy.
- Agent--a representative of an insurance company who handles the sale of an insurance contract.

8.52 Insurance language, though difficult, can be understood. These steps may help in understanding the language of insurance agreements.

- Quickly read through - skim the agreement.
- Slowly reread the agreement underlining words, terms or phrases which you do not comprehend.
- Find a simpler phrase or word for the difficult to understand words.
- Reread the insurance agreement.
- Verbally interpret the agreement to someone, preferably your agent.

<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation</u>
8.7 The student will become aware of where they can seek a remedy to unsatisfactory company/vendor practices.	8.71 Demonstrate the ability to find a solution to an insurance problem.	Writing	CASE studies (see 1)

Taxonomy

8.71 A consumer with an insurance problem may take the following steps to seek a solution. Call your agent. Ask questions. If the agent does not answer your questions to your satisfaction, call another agent. Address your problem to the Local Consumer Protection Bureau, the Attorney General's office or to the director of an insurance association. A consumer may find a solution to an insurance problem from radio, television or newspaper consumer action lines. There is an answer for all insurance problems if the consumer pursues a course of action through the proper channels.

9. TAXES

Goal: Understanding the consumer's role and responsibilities in the local, state and federal tax structure.

Specific Objective

9.1 The student will understand the reasons for and types of taxes within each level of government.

Performance Indicator(s)

9.11 List 5 taxes which consumers pay on each of the government levels: federal, state, local.

9.12 Define and give an example of progressive, proportional and regressive taxation.

9.13 Point out 4 reasons why taxes are needed.

9.14 Outline 4 new sources of taxes or revenue used by the government.

Language Skill(s)

Library search

Dictionary

Writing

Writing

Suggested Evaluation*

Guide sheets (see 1)

Definitions

Two page summary (see 4)

Question and answer (see 8)

Suggested Learning Experience(s)

1. Students develop fictional case studies about consumers facing insurance problems. Use correct writing format. Share case studies with the rest of the class. Decide on the course of action to pursue.

<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation*</u>
	9.15 Select 3 qualities which make a good tax.	Verbal	Survey (see 5)

* Check Suggested Learning Experiences column for numbers in parentheses.

Taxonomy

9.11 Taxes which consumers pay include:

Taxes paid on the federal level

- income tax
- estate tax
- social security tax
- tires (for use on highway)
- airplane tickets
- diesel fuel, gasoline, lubricating oil
- telephone, telegrams
- alcoholic beverages
- cigarettes, cigars
- corporate income tax
- excise tax
- fishing equipment
- firearms, shells

Taxes paid on the state level

- income tax
- sales tax
- gasoline
- alcoholic beverages
- cigarettes
- utilities
- hotels and motels
- real estate transfer tax
- corporate income tax
- inheritance tax
- auto licenses
- lottery
- insurance premiums

Suggested Learning Experience(s)

1. Invite tax experts to speak to the class. Ask them to describe what taxes consumers pay on all levels of government. Students, working in committees, develop guide sheets describing federal, state and local taxes. Further information should be sought from library.
2. Debate: "Resolved: The state sales tax should be eliminated."
3. Define the terms progressive, proportional and regressive taxation. Give an example of each.
4. Write a 2 page summary, "Why we need taxes." Focus on transitions.
5. Survey school personnel on 3 taxes which are good and 3 which are bad. Summarize results and report to class.
6. Make up a crossword puzzle using key terms and phrases about taxes paying attention to spelling.
7. Play a word association game asking students to list the first word which comes to mind in connection with a specific tax

Taxonomy

9.11 (cont.)

Taxes paid on the local level

- property tax
- earnings and income taxes
- sales tax (often a % of state sales tax)
- utility tax
- amusement tax
- hotels and motels, parking, auto stickers
- animal licenses
- business licenses

9.12 Definition and examples

- Progressive Tax--The effective tax rate increases as a person's income goes up, e.g., federal income tax.
- Proportional Tax--Effective tax rates stay the same regardless of income, e.g., licenses and fees.
- Regressive Tax--Effective tax rate decreases as income goes up, e.g., sales tax.

9.13 Reasons why taxes are needed.

- To operate government programs such as education and social agencies.
- To maintain government operations such as buildings and equipment.
- To add revenue to further increase defense measures.
- To maintain decent standards of living for all, especially, the disadvantaged through subsidies.
- To subsidize research, inventions and experiments which benefit all U.S. citizens.

Suggested Learning Experience(s)

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word or phrase. Write words in complete sentences.

8. Answer: From what new sources does the government seek revenue? Imagine how this will be done in the future.
9. Debate, "Resolved that property taxes are the best way to fund education."

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9.14 State and local governments seek more revenue through:

- Grants-in-Aid--This program gives states money from the federal government to be used for specific purposes. The states are required to contribute financially to the project.
- Revenue Sharing--Allows a no-strings attached idea for the federal government to give individual states money.
- A National Value-Added Tax--This tax is the same as a state sales tax.
- Lotteries--Gambling, slot machines, off-track betting and Bingo exemplify another method of revenue for states and cities.
- Putting People To Work--A non-working adult strains the government revenue twice. He does not pay income taxes but he does need assistance. Programs which concentrate on putting people back to work are a positive revenue source for the government.

9.15 A good tax will have some of these qualities:

- Fairness--Most Americans willingly pay a tax which is fair.
- Easy to understand--What you owe, when you owe it and the consequences for not paying make a tax easy to understand.
- Easy to collect.
- Paid directly--A tax which is paid directly is easier to assess and collect.
- Beneficial--Everyone should see the value of paying a tax.

<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation</u>
9.2 The student will have the knowledge to complete various tax forms and schedules.	9.21 Define words and phrases on the U.S. Individual Income Tax Form - 1040.	Dictionary	Definitions

Taxonomy

9.21 Words and phrases which appear on the 1040 Form.

- Gross income--One's total income.
- Bonus--Income given to you over and above your usual salary. Must be included in gross income on Form 1040.
- Commissions--Money given to a broker or agent for transacting business between 2 parties. Must be included in gross income on Form 1040.
- General deductions--Expense items one subtracts from gross income when preparing Form 1040.
- Net income--Total income after deductions.
- Taxable income--What one pays taxes on after deductions and exemptions are subtracted.
- IRS--Abbreviation for Internal Revenue Service which collects income taxes for the U.S. government.
- Joint return--When a married couple file income taxes together.
- Exemptions--On Form 1040 exemptions allow the taxpayer to reduce taxable income. Dependents are children, spouse, blind.

Suggested Learning Experience(s)

1. Write a comedy sketch using 5-10 words found in Form 1040. Act out.
2. Play hangman using words and phrases from Form 1040.
3. Students fill out a 1040A Form.

Taxonomy

9.21 (cont.)

- Interest income--Money paid to someone for saving and investing that money.
- Dividends--Money paid to stockholders of stocks and bonds.
- Alimony--Money received by a spouse from his or her spouse after a divorce.
- Occupation--The title of your job, e.g., teacher, farmer, cab driver.

Suggested Learning Experience(s)Specific Objective

9.3 The student will be aware of how tax dollars are used to support various programs.

Performance Indicator(s)

9.31 Demonstrate knowledge of 2 federal tax supported programs.

9.32 Discuss own values about areas in which taxes should be used.

Language Skill(s)

Writing

Suggested Evaluation

TV script
(see 1)

Reading

Poem (see 2)

Taxonomy

9.31 Some federal tax supported programs include:

- National Defense--In 1979 25¢ of each dollar went for national defense made up of personnel in the Army, Navy, Air Force and Marine Corps. Equipment like submarines, missiles and airplanes account for a large share of the national defense budget.
- International Affairs--Helps maintain good public relations. Peace Corps and United Nations are examples of programs supported by International Affairs.
- Space Research
- Agriculture

In 1979 these programs used 22¢

Suggested Learning Experience(s)

1. Select one tax supported program. Develop a script for an educational TV program showing your knowledge about both the program and the taxes supporting the program.
2. Read the poem, "I Paid My Taxes" and discuss.*

I've paid my taxes, I'm proud to say
I bought some civilization today
I helped build a bridge and a highway, too
I bought my three children a park and a
zoo -

9.31 (cont.)

- Natural Resources
- Commerce and Transportation
- Housing
- Health, Labor and Welfare
- Education--This also includes social programs to improve an individual's future.
- Veterans' Benefits--Many special considerations are given to veterans and their dependents.

of every dollar spent by the federal government.

9.32 Students will have a variety of values reflected in a discussion concerning what programs should be supported by taxes. Some will feel only the poor should receive help; some will say taxes are much too liberal in what they support. Some key concepts to listen for include the justification for the tax and fairness.

When I paid my taxes.

I helped build a library and paid for more books

I paid for having the streets cleaned, improving their looks

I helped put drinking founts in my home town

I paid for new street lights in the same old town

When I paid my taxes.

I helped hire a doctor and firemen's crew

I paid for a nurse and a policeman, too

I helped buy a young man a very fine job

I helped buy a bathing beach for my Dorothy and Bob

When I paid my taxes.

I helped build a school and hire teachers, too,

I helped buy a golf course for my son to play thru

I helped build a museum of music and art

Now, friends, don't you really think I was smart

When I paid my taxes?

*Poem, "I Paid My Taxes"

by C.C. Clinton. From Childhood Ed,
1941. Jr. of the Assoc. of Childhood
Ed. Int., Washington, D.C.

<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation</u>
9.4 The student will be aware of community resources which can assist them in using the tax structure to their best advantage.	9.41 Select 2 community resources considered beneficial. 9.42 Defend a tax which needs support.	Verbal Verbal	Information statement (see 1) Pleading a case (see 3)

Taxonomy

9.41 The following community resources can be considered as beneficial:

- Free services and resources (Library)
- Low cost services and resources (recreation centers)
- Public services and resources (police, school)
- Private services and resources (utility companies)

9.42 Students may defend taxes which support:

- Library
- Public schools
- Health centers
- Recreation centers
- Police
- Government agencies
- Hospitals
- Highways
- Mass transportation

Suggested Learning Experience(s)

1. Each student prepare a 30 second public information statement to be read over the intercom in your school. The statement will inform students of community resources which can assist them and their families.
2. Conduct a community resources hunt. Each student will hunt through the library, town hall and telephone book to compile a list of resources available in their community. What community resources should be added to the list?
3. Set up a panel of judges who will decide on 5 community resources about to receive tax support. Each student should represent a different community resource. Each plead his/her case to the panel of judges to win approval for tax support.
4. Imagine a totally different tax structure from the one which exists in the U.S. today. Write a one page summary explaining how your tax structure works.

Taxonomy

9.42 (cont.)

Suggested Learning Experience(s)

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5. Invite a town official - Mayor, Town Manager or Councilperson - to speak about acquiring and allocating taxes in his town.

10. CONSERVATION OF ENERGY AND RESOURCES

Goal: Increasing the student's core of information related to energy, ecology and economic issues upon which student's can base further inquiry, research and value judgments.

<u>Specific Objective</u>	<u>Performance Indicators</u>	<u>Language Skills</u>	<u>Suggested Evaluation</u>
10.1 The student will develop an awareness of challenges facing the U.S. and the resources, ecology and economics.	10.11 Make conclusions concerning the use of three sources of energy, for example, coal, wood and oil.	Writing	A report (see 1)
	10.12 Summarize what radio, television and newspapers report about the local ecology.	Listening, reading, oral communication	Oral report (see 3)
	10.13 Give six reasons why everyone should receive some education on energy.	Writing	Results of family experiment (see 9)

* Check suggested learning experiences column for numbers in parentheses.

Taxonomy

10.11 Sources of energy and conclusions which can be made.

Coal

- Available in great quantity in the U.S.
- Not expensive to use

Suggested Learning Experience(s)

1. Prepare a report on various U.S. energy resources.
2. Write interrogative sentences by developing a list of questions concerning energy

Taxonomy

10.11 (cont.)

- Not difficult to transport
- Keeps men employed
- Pollutes the air when it is burned
- Difficult to extract from a mine
- Mining can be hazardous
- Land erodes in strip mining

Oil

- Diversified usage (cars, homes, industry, plastics)
- Little pollution
- Highly efficient
- Non-renewable resource
- Limited U.S. supply
- U.S. demands must rely on imported oil
- Expensive

Natural gas

- Efficient
- Not a great pollutant
- Supply limited
- Transportation can be difficult and dangerous

Nuclear fuel

- Readily available
- Clean, efficient
- Radioactive waste
- Waste needs special storage
- Uses same materials as atom bomb

Wood

- Readily available
- Renewable if trees are replanted
- Land used for planting trees competes with other land uses, for example, wheat, cotton, grazing
- Relatively inexpensive
- Wood for fuel competes with wood used for other products, for example, furniture, paper

Suggested Learning Experience(s)

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use in the future. Discuss.

3. Sift through local newspapers or listen to the radio or watch television news and programs for ecology concerns. Report to class.
4. Invite a local newspaper reporter who investigates and writes about ecology concerns to speak to the class and tell about his findings. Students develop questions to ask speakers.
5. Study the choice of words used in newspaper articles about energy, ecology and economics. See how semantics help or hinder the truth.
6. Watch current films or TV programs, such as, China Syndrome. Write a one page opinion paper on the use of nuclear energy. Is it safe?
7. Imagine that within one year the U.S. will have depleted it's oil supply. Write a story which reflects your feelings about the day the U.S. will no longer have it's own oil supply.
8. Hold an energy resources fair. Use proper written invitations and telephone communication techniques to attain fair sponsors and participants.
9. Each student should use his family as an experiment for saving on energy. Develop a daily, weekly and monthly plan. Share and report to the class.

Taxonomy

10.11 (cont.)

Wind/Solar

- Large supply
- Does not pollute
- Renewable
- Free to user
- Needs to be stored
- Needs more technology to perfect its use

Water

- Doesn't pollute the air
- Dams or waterfalls are needed for energy making

Geysers (Steam heat found in the earth)

- Available only in certain locations
- Difficult to harness
- May pollute air and ground water
- Renewable
- Already used in some businesses and homes

10.12 Mass media may include reports on the following topics concerned with the ecology:

- Effective pollution control measures for air and water
- Modern methods of solid waste disposal
- End to open burning
- Effective sign and billboard control
- Junkyard screening and control
- Adequate open space
- Playgrounds, parks and other recreation areas
- Protection of water courses, natural areas, especially in or near cities
- Protection of wildlife
- Trail systems for walking, hiking and biking
- Underground utility lines
- Conservation education in schools

Suggested Learning Experience(s)

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10. Study the Solid Waste Management Corporation of Rhode Island. Write an analysis of its present operation.

10.13 The study of energy can be a positive experience for students if they appreciate how energy affects their lives and if they understand the importance of energy for all facets of life such as food, clothing, shelter, industry, personal care and recreation.

<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation</u>
10.2 The student will gain an understanding of how supply and demand affects energy including its source, patterns of usage and predicted future outlook.	10.21 Define 10 words related to supply and demand.	Dictionary usage	Definitions
	10.22 List at least 4 sources of energy used in the U.S.	Writing and verbal	Oral report (see 8)
	10.23 Identify 3 sources of energy most often used in a home.	Verbal communication	Questionnaire (see 4)
	10.24 Point out 2 factors which predict the future energy outlook in the U.S.	Writing	Letter of inquiry (see 6)
	10.25 Predict the consequence of a short supply of energy with a large demand.	Writing	Descriptive paragraph (see 5)

Taxonomy

10.21 Words related to supply and demand concept:

Supply--goods and services made available to the public.

Demand--the amount of a good or service consumed at a particular price.

Circular flow--the economic activity of consumers and business in the production and distribution process.

Producers--businesses which supply consumers with goods and services.

Consumers--people who demand goods and services.

Price--the amount consumers agree to pay for products which business is willing to manufacture and sell.

Demand schedule--shows the relationship between quantity and price to determine the demand for a product.

Resources--raw materials, labor, technology and capital needed to produce goods and services.

Free enterprise system--allows individuals to own and operate a business, large or small.

Constant--a factor which shows the same demand on a product from year to year.

Suggested Learning Experience(s)

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1. List 10 words relating to supply and demand. Define each word and write it in a complete sentence. Compare list with other class members.
2. Make up an original game showing the concept of supply and demand.
3. Write a short essay on the advantages or disadvantages of a particular energy source.
4. Develop a questionnaire and sample a group of homeowners. Ask them what sources of energy are most often used in the home.
5. Imagine that the U.S. is no longer able to use oil as a source of energy. Write descriptive papers about people's reactions. Submit most innovative to newspaper for publication.
6. Find the appropriate person and address and then write a letter to one of the large oil companies (Mobil, Esso, Texaco). Ask what they are doing to ensure that oil will be available for use in the U.S. for the next 50 years.
7. Interview a person who is between 70-80 years of age. Ask questions about energy usage when this person was a teenager. What were the greatest energy demands of 50 years ago? Outline the discussion.
8. Investigate the sources of energy used in your community. Report findings orally.

TaxonomySuggested Learning Experience(s)

10.22 Of the following sources of energy used in the U.S.
1-8 are renewable, 9-12 are non-renewable.

1. Solar
2. Geothermal
3. Wind
4. Tides
5. Wood
6. Water
7. Fusion: deuterium is found in water. It is the fuel necessary to provide fusion.
8. Refuse
9. Coal
10. Natural gas
11. Oil
12. Uranium

10.23 The three most used sources of energy in a home are oil, gas and electricity.

10.24 Factors which predict the future energy outlook are:

- Inflation. Consumers may need to pay more for energy. Spending on energy may become a top priority.
- Supply and demand. If the supply of an energy resource is in great demand, the amount available will deplete quickly.
- Conservation. Is one method for prolonging the use of nonrenewable energy sources.
- Population demands. With a larger population and more homes, goods and services will increase the demands for energy.
- Government controls. Laws, restrictions and incentives may help or hinder future energy supply and demand.

Taxonomy

10.25 Consequences of a short supply of oil are already felt in the U.S. Imagine what a short supply of wood might mean. One can predict the consequences of a short supply and a large demand on any resource will:

- Increase price
- Establish priorities for allocation
- Increase government intervention
- Cause a feeling of panic where hoarding could result.

Suggested Learning Experience(s)

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<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation</u>
10.3 The student will identify the interrelationship among energy, ecology and economic problems and solutions in terms for the consumer.	10.31 Explain the interrelationship of energy, ecology and economics with four steps in the manufacturing of a product. 10.32 Give 3 examples how economics and energy affect the U.S.	Library research Writing	Research report (see 1) EEE newspaper (see 2)

Taxonomy

10.31 Steps to consider in tracing a product from start to finish.

- Raw materials-what ones are needed? Where do they originate?
- Production-what is the process? Is it lengthy?
- Packaging-what is the process? How many resources are used?
- Distribution-what mode(s) of transportation is used?

Suggested Learning Experience(s)

1. Select a product often used in the home. Trace it from start to finish. Research the strain on the ecology, the demand for energy and the economic picture of supply and demand. Write findings in a report. Present to class.
2. Develop an EEE Newspaper (Energy, Ecology, Economics). Show how your school uses EEE.

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Taxonomy

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Suggested Learning Experience(s)

10.32 The American market system relies on all forms of energy for survival. Examples of how economics and energy affect the U.S. are:

- In the import-export trade.
- In the cost of goods and services to the consumer.
- In the relationship of supply and demand.
- In making business accountable for clean air and water in the manufacturing process.
- In the role of the federal, state and local governments as fiscal policies are made.

<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation</u>
10.4 The student as a consumer will make an individual plan of action to help in solving problems presented by energy shortages, threats to the environment and related concerns.	10.41 Give four ways to conserve energy in the home. 10.42 Decide on one plan for saving energy in own life.	Writing Oral	Energy chart results (see 1) Energy saving decision (see 2)

TaxonomySuggested Learning Experience(s)

10.41 Some ways in which home energy can be conserved:

- Use proper insulation, weather stripping, caulking and storm windows.
- Lower the thermostat a few degrees.
- Keep heating and cooling equipment clean.
- Insulate hot water pipes.
- Reduce the hot water temperature to 140 degrees Fahrenheit or lower.
- Use cold water to wash clothes.

1. Prepare an energy chart showing ways homeowners conserve. Survey friends and neighbors on their energy conservation habits and record on the chart. How do the results compare between winter and summer.
2. Brainstorm ways in which each class member can save energy. Analyze the impact on

10.41 (cont.)

- Fix leaky water faucets.
- Open refrigerator doors only when necessary.
- Turn off the range a few minutes before the food is cooked.
- Preheat the oven only when necessary.
- Use a timer to avoid overcooking.
- Fill the dishwasher before washing.
- Don't overload automatic washers and dryers.
- Use a clothesline.
- Turn off lights not needed.
- Use cold water to operate a food disposal.

10.42 Some plans to save energy might include:

- Walking instead of riding.
- Driving at 55 mph or less to save fuel.
- Wearing warmer clothing in cold weather and turn down the thermostat.
- Using fewer electric appliances.
- Air drying hair.
- Taking care of clothing to require less cleaning or pressing.
- Taking a shower instead of a bath.
- Double dating.

energy conservation if each person saved in only one way. Decide and implement one energy saving plan.

3. Keep a journal which emphasizes how you are personally effected by energy problems and cost.

<u>Specific Objective</u>	<u>Performance Indicator(s)</u>	<u>Language Skill(s)</u>	<u>Suggested Evaluation</u>
10.5 The student will become aware of alternative sources of energy and their use for the future.	10.51 List 3 alternative sources of energy. 10.52 Point out 3 reasons for the value of nuclear power. 10.53 Describe and interpret sources of energy used in science fiction.	Writing Verbal communication Reading	Letter (see 1) Oral Report (see 2) Essay questions (see 3)

Taxonomy

10.51 Alternative sources of energy for the 1980's:

- Sun
- Wind
- Geothermal
- Nuclear

Refer to taxonomy 10.11 for more information on sources of energy.

10.52 Some values of nuclear power include:

- Inexpensive
- Efficient
- Clean
- Plants can be built in many locations
- Technological advances

10.53 Sources of energy used in science fiction will vary with the student's reading level and background. A student should be able to imagine or speculate on sources of energy, for example, energy from the stars, from light rays, from vibrations in the Black Hole, from chemicals, from special clothing.

Suggested Learning Experience(s)

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1. Write a letter to the U.S. Energy Commission requesting information on alternative sources of energy.
2. Report orally on field trip to sites using alternative sources of energy: e.g., nuclear power plant.
3. Read novels or view movies on science fiction. What sources of energy are used? Imagine what the sources of energy are if they are not mentioned?
4. Read and discuss a novel or magazine articles written about energy shortages, energy waste and environmental problems.
5. Decide on a local environmental issue which needs attention, e.g., dumping of hazardous wastes. Through letters, telephone calls, news releases or visits motivate a community organization to take action on the issue.

SOME SUGGESTED ACTIVITIES FOR THE GIFTED AND SLOW LEARNERS OF ENGLISH

Gifted

- Find examples of the economic systems which existed in British and American literature in the 1800's. Note the source using correct bibliographic entry.
- From library references and literature sources research the reasons for popularity in roller skating. Relate it to the concept of supply and demand. Present your findings in a term paper with footnotes and bibliography.
- For a one month period graph your family's economic activities. Present your findings visually and orally.
- Study the interdependent nature of the American market system in Ayn Rand's, Atlas Shrugged. Invent three major questions for which you will find answers from the reading.
- Write a one act play showing how credit is used in the lives of two main characters. Perform.
- After researching the do's and don'ts on credit, create a videotape to inform members of your class.
- Assume you are the president of your own company. Draw up a contract with the employees. Include a paragraph which explains how an employee can break the contract.

Slow Learner

- From recent magazines and newspapers cut out pictures of one product, for example, candy. Through oral discussion decide which kind of candy bar is most popular. Relate the decision to competition.
- To show supply and demand set-up two mock stores which sell pencils. One store has many and the other very few. Students then buy the pencils. Notice what happens when the store with a few pencils runs out. With the newly purchased pencils students write words supply, demand.
- Students touch soft, furry, rough, scratchy, dry, wet, etc. objects. Decide which they like best and least. Relate this value judgment to the reason why people buy what they do. Write 5 things which students like, for example, bed, toys, candy, play and cars.
- Set-up a mock situation where students borrow play money. Relate this to credit. Site examples of how student's parents use credit.
- Decide on a secret among 5-6 students. Write it on paper and give to the teacher. Make a contract not to tell anyone the secret for a day. Discuss obligation in relation to a contract.
- Reproduce a savings account passbook. Periodically, allow students to make deposits in their passbook. With each deposit write the amount of money deposited.

SOME SUGGESTED ACTIVITIES FOR THE GIFTED AND SLOW LEARNERS OF ENGLISH

Gifted

- Invent a word game using vocabulary pertinent to consumer law and protection such as the words listed in Taxonomy 3.51.
- Personify a \$10 bill. Take it through ten humorous excursions in a personification essay. Publish.
- With knowledge about comparison shopping for goods and services conduct a thorough investigation of your favorite and least favorite department stores. Devise a set of standards which each store must meet. Include the different methods retailers offer to the consumer for comparative value. After your investigation write to the store manager informing him/her about your investigation and how the department store scored.
- With three specific examples explain why a budget should be flexible. Tie in advertising, emotions and consumer wants and needs based on values. Present your explanation to a panel of experts who feel budgeting should not be flexible.
- Write lyrics to a song stating your views of the present energy-ecology conflict.
- Develop a cartoon character who advocates a specific message about the environment. Write 10-12 messages and publish in your local or school newspaper.

Slow Learner

- Clip coupons from magazines and newspapers. Categorize into items such as cat food, cereal, soap. Reproduce the coupons using correct spelling.
- Distribute examples of advertising to class. Ask each student to discuss how he or she feels about the advertisement. If possible read aloud the message in the advertisement.
- Make a collage from pictures which show what we waste, for example, the cup from a Mac Donald's shake. Draw a bright circle around items which some students in class do not waste.
- Start a recycling center in your classroom. Observe the many uses for the recycled items.
- Take a school grounds field trip to collect litter.

science

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The Consumer Citizenship Curriculum Guide for Science has been developed to help Science teachers incorporate some parts of the Rhode Island Consumer Education Curriculum Guide in their subject matter area. All of the objectives covered in the R.I. Guide have not been included in this Science Guide. A Grid may be found in the Appendix. It gives a detailed picture of the objectives chosen for Social Studies, English, Mathematics as well as Science. Hopefully, as the student moves through these four subject matter areas the objectives will be adequately covered. The R.I. Guide does not assign numbers to any of the components or specific objectives; however, in this Science Guide we have done so.

Science Philosophy

The following philosophy, drawn from a list of objectives selected for the Assessment of Educational Progress by the Committee on Assessing the Progress of Education (1969), was used in developing the Consumer Citizenship Curriculum Guide for Science.

Science students should know fundamental facts and principles of science such as characteristics of electricity and magnetism, heat and simple kinetic theory, nature of chemical reactions and ecology.

Students should also possess the abilities and skills needed to engage in the processes of science such as having the ability to identify and define a scientific problem.

All students should understand the investigative nature of science as well as have the right attitudes about the appreciations of scientists and science on a whole.

As a result it is hoped the student will learn to think through daily problems, recognize and accept this place in a scientific society and develop some personal interests which are scientific in nature.

How to Use This Guide

1. Study the Guide format which gives the main component, the goal, Science contribution and specific objectives.
2. Each specific objective lists performance indicators, the Science objective used and the suggested evaluation for each performance indicator.
3. The taxonomy will help teachers understand the consumer knowledge related to the performance indicator.
4. Suggested learning experiences provide activities which are directly or indirectly related to the specific objective. No effort has been made to provide a complete list of learning activities; however, we have made an effort to suggest some of the more unusual activities. Study the performance indicator and then select, rearrange and add suitable activities to provide the learning experiences desired.
5. No attempt has been made to place the suggested learning experiences in a specific order or sequence.
6. Some learning experiences for the gifted and slow learner appear after component 10.

3. CONSUMER LAW/PROTECTION

Goal: Increasing the students' understanding and knowledge of their role as consumers especially the legal rights and responsibilities that insure the bargaining power of all parties.

Specific Objective 3.3: The student will become acquainted with agencies of protection from fraudulent consumer schemes.

Science Contribution: It is suggested that the following science knowledge be incorporated into a program on consumer science. Dozens of other relevant experiences or problems may be added to further enhance the students' knowledge that Science and a wise consumer are related.

Performance Indicators	Science Objective	Suggested Evaluation
3.3.1 Describe 3 ways in which the Consumer Product Safety Commission uses science.	Science application.	Essay type questions
3.3.2 Describe how the Food and Drug Administration uses science.	Science application.	Multiple choice
3.3.3 List 4 ways in which science can contribute to wise consumerism.	Utilize science in everyday life.	Listing
3.3.4 Describe 2 science principles related to drugs.	Utilize science in everyday life.	Completion type test
3.3.5 Describe 2 science principles related to cleaning agents.	Utilize science in everyday life.	Results from lab experiments
3.3.6 Describe 2 science principles related to food.	Utilize science in everyday life.	Results from lab demonstration
3.3.7 Describe 2 science principles related to the automobile.	Utilize science in everyday life.	Essay type questions

Taxonomy	Suggested Learning Experiences
<p>3.3.1 The Consumer Product Safety Commission realizes that science principles and concepts are needed to explore the safety of consumer products. The CPSC uses science to</p> <ul style="list-style-type: none"> • Analyze the chemical makeup of products. Paint, for example, containing high levels of lead has been banned to reduce the risk of lead poisoning. • Conduct research and develop test on the potential risk a product might have. Firecrackers with more than 50 milligrams of powder have been banned and other fireworks must conform to specific safety requirements. • Design superior safety packaging. Safety packaging is required for containers of potentially dangerous drugs and household chemicals. The number of childhood poisonings by aspirin, for example, dropped 55 percent between 1972 and 1976. 	<ul style="list-style-type: none"> • Conduct research on the Consumer Product Safety Commission and the Food and Drug Administration. Determine what products are being tested for possible risks to the public. Discuss the role of science in each of these agencies. • Plan a field trip to a CPSC or FDA agency. Report how you saw evidence of science used. • Analyze the chemical makeup of paints - leaded and unleaded. • Apply general principles of science by testing various consumer products. For example, evaluate cigarettes by using an aspirator to collect tars, to determine quantity of smoke produced, to collect products on the filter, mouth end and tobacco end. • Test detergents to determine biodegradability. • Compare the effects of caffeine on the body's pulse rate before and after consumption. • Make comparisons for effectiveness between deodorants and antiperspirants. • Research scientific evidence about the use of brand-name and generic drugs.
<p>3.3.2 Virtually every product in a supermarket or drugstore is in some way regulated by FDA. The FDA-physicians, chemists, nutritionists, microbiologists and pharmacologists-conduct the necessary scientific research solely for the protection of the public.</p>	
<p>3.3.3 Science can contribute to wise consumerism because it presents an opportunity to</p> <ul style="list-style-type: none"> • evaluate products • instigate awareness of the product's use in society 	

<u>Taxonomy</u>	<u>Suggested Learning Experiences</u>
3.3.3 (cont.)	<ul style="list-style-type: none"> • relate a product to oneself • analyze, compare and rate products.
3.3.4	The principles of solubility and acidity can be used in testing drugs. For example, antacids can be used to test for solubility by dissolving antacid in water and the acidity of aspirin is determined with ph paper.
3.3.5	Science principles can be applied to clearing agents through tests such as checking for water hardners and for the amount of water content in soap.
3.3.6	Science principles can be applied to food through test for food components and for quality of food such as the quality of eggs.
3.3.7	Science principles can be applied to the automobile by testing for volatility of gasoline and viscosity of oil.

10. CONSERVATION OF ENERGY AND RESOURCES

Goal: Increasing the student's care of information related to energy, ecology and economic issues upon which student's can base further inquiry, research and value judgements.

Specific Objective 10.1: The student will develop an awareness of challenges facing the United States and the resources, ecology and economics.

Science Contribution: In order to better understand the challenges facing the United States and energy it is suggested that the following science knowledge be incorporated into a program. The science teacher may wish to add dozens of other relevant science experiences or problems. Energy is a major topic for which a great deal of knowledge is needed.

Performance Indicators	Science Objective	Suggested Evaluation
10.1.1 State the U.S. challenge facing the scientist concerning energy usage.	Identify a scientific problem.	Research paper
10.1.2 State the U.S. challenges facing the scientist concerning use of energy resources.	Identify a scientific problem.	Research paper
10.1.3 State the U.S. challenge facing the scientist concerning the environment.	Identify a scientific problem.	Research paper
10.1.4 Write a definition for energy.	Fundamental fact.	Essay exam
10.1.5 Define potential and kinetic energy.	Relate mechanical potential and kinetic energy to thermal energy.	True & false test
10.1.6 Identify the Laws of Conservation of Energy.	Associate the Laws of Conservation of Energy with various principles.	Completion type test
10.1.7 Interpret the relationship of energy, work and power.	Check logical consistency.	Complete science problems
10.1.8 Explain how energy is measured.	Interpret data.	Matching test
10.1.9 List the 5 primary sources of energy.	Fundamental fact.	True & false test
10.1.10 Demonstrate the ways in which energy is transferred.	Read scientific material critically.	Essay exam
10.1.11 Describe solar energy as one of the 5 sources of energy.	Atmospheric science.	Multiple choice test
10.1.12 Express how fossil fuels were formed.	Fossils and geological history.	Science report
10.1.13 Distinguish between continuous and and depletable energy sources.	Fundamental fact.	Report from field trip or reading assignment

Performance Indicators	Science Objective	Suggested Evaluation	
10.1.14	Illustrate electricity as a form of energy.	Characteristics of electricity.	Experiments results
10.1.15	Define vocabulary related to electricity.	Fundamental fact.	True & false quiz
10.1.16	Explain how electric current is conducted in wires.	Characteristics of electricity.	Observation report
10.1.17	Explain D.C. and A.C. voltage and current.	Characteristics of electricity.	True & false quiz
10.1.18	Interpret the meaning of resistance in electricity.	Characteristics of electricity.	Completion-type test
10.1.19	Express electric power as a formula.	Characteristics of electricity.	Results from science problems
10.1.20	Express how electricity is generated, transmitted and distributed.	Characteristics of electricity.	Diagrams

Taxonomy	Suggested Learning Experiences	
10.1.1	<p>The challenge facing energy usage reflects the consumer's need for massive amounts of energy with greater and greater demands daily. Answers are needed for the question, "How will the U.S. supply industry and individuals with the energy they want?" A scientist, perhaps, would suggest that more research, experiments and technology are necessary to erase the present problems of usage and demands.</p>	<ul style="list-style-type: none"> In reference books read about the challenges facing U.S. energy, energy resources and the environment. As a young scientist, what would you suggest be done to help solve energy problems of the future.
10.1.2	Challenges facing U.S. resources:	<ul style="list-style-type: none"> Solve problems for potential energy using the formula $p.e. = w \times h$ or mgh when $p.e. =$ potential energy $w =$ weight $h =$ height. $m =$ mass

Taxonomy

Suggested Learning Experiences

10.1.2 (cont.)

Always sure of an abundance of natural resources in the past, the U.S. sees that this is no longer true. A scientist might meet the challenges by saying greater efficiency must come from natural resources, greater technology is needed to improve alternatives and inventions must create new chemical and mechanical forms of energy.

10.1.3

The challenge facing the U.S. environment is one of healthy, clean air, water and land. Meeting energy demands has created environmental pollution beyond comprehension. Scientists need to improve technology and to develop harmony between the environment and energy users.

10.1.4

Energy (Fowler, p. 224) - a quantity having the dimensions of a force times a distance which is conserved in all interactions within a closed system. It exists in many forms and can be connected from one form to another. Common units are calories, joules, BTU's and volts.

10.1.5 Forms of energy:

- Kinetic - mechanical energy that a moving body possesses. For the consumer to use energy it must be converted to usable form. The formula for kinetic energy = $\frac{w \times v^2}{2g}$ when w = weight,

v = velocity in meters/sec.,

g = acceleration due to gravity.

- Potential - stored energy. It must be converted to kinetic energy before the consumer uses it. Gasoline, batteries, coal and wood are examples of potential energy. The formula is potential energy = weight x height.

- Solve problems for kinetic energy using the formula

$$k.e. = \frac{w \times v^2}{2g} = \frac{1}{2}mv^2$$

when

k.e. = kinetic energy

w = weight

v = velocity in meters/sec.

g = acceleration due to gravity.

m = mass

- Illustrate how kinetic energy may be changed into potential energy.

- Explain the meaning of the Laws of Conservation of Energy.

- Solve problems about work and power using the formulas

$$p = \frac{w}{T} \text{ when}$$

p = power

w = work

T = time to do the work

- To better understand the relationship of work, power and energy answer the following questions:

- How are work and energy related?
- If a force acts on a body perpendicular to its motion, is work accomplished? Explain.
- Explain the difference between work and power.

- Describe how falling water may do work.

Taxonomy

10.1.6 **Laws of Energy:**

- First Law of Thermodynamics - Also called the Law of Conservation of Energy: Energy can neither be created or destroyed.
- Second Law of Thermodynamics - One of the two "limit laws" which govern the conversion of energy. Referred to as the "heat tax," it can be stated in several equivalent forms, all of which describe the inevitable passage of some energy from a useful to a less useful form in any energy conversions.

10.1.7 Work is mechanical energy. It is man's way of rearranging, distorting or transporting things. Power is the rate at which energy is used. Power is equated by the formula $P = \frac{w}{T}$ when P = power, w = work, T = time to do the work.

At the same time w (work) = power \times time. Energy plays an important role in work and power. If energy was not present, both would not exist.

10.1.8 Energy is measured in units which apply to the work or power exerted. Some units for measuring energy are: (Fowler, pp. 223, 226, 228)

- Calorie - a unit of heat energy equal to the amount of heat that will raise the temperature of one kilogram of water 1 Celsius degree. It is approximately equal to 4 BTUs. (In scientific terminology this is the kilocalorie, 1,000 small calories.)
- Watt - a metric unit of power usually used in electric measurements which gives the rate at which work is done or energy expended. One watt equals one joule of work per second.

Suggested Learning Experiences

- Prepare reports on different units of energy measurement, for example, calorie, BTU, joule, watt. Answer questions such as
 - How do calories measure the quantity of heat?
 - How is the joule related to mechanical energy?
 - Why do users of coal refer first to the BTU's per pound of coal than the price per ton?
- To better understand solar energy through photosynthesis conduct experiments on germination. Considering the proper environment, place one seed sample near a window with ample sunlight. Place another sample away from sunlight. Observe the number of days it takes for both samples to germinate. What does your observation conclude about the sun's role in energy production?
- Write the chemical formulas for minerals in depletable and continuous sources of energy. For example, uranium- U, uranium oxide- U_3O_8 , natural gas (pure methane) CH_4 .
- Plan field trips to investigate areas where primary sources of energy are being used. Note the process of using and the end result from the primary source.
- After researching the primary sources of energy, diagram or

Taxonomy

10.1.8 (cont.)

- Kilowatt - a unit of power, usually used for electric power, equal to 1,000 watts, or to energy consumption at a rate of 1,000 joules per second.
- Joule - a metric unit of work or energy; the energy produced by a force of one newton operating through a distance of one meter.
- British Thermal Unit (BTU) - a unit of heat energy equal to the quantity of heat necessary to raise the temperature of one pound of water one Fahrenheit degree. It is equal to one-quarter of a calorie.

To convert these units of energy refer to recent science texts.

10.1.9 Primary sources of energy: solar, tidal and geothermal, nuclear, fossil fuels.

- Solar will be described in taxonomy 10.5
- Tidal - This form of energy relates to the earth-moon rotation. As the ocean rises and falls because of the gravitational pull on the water, tidal energy is formed. Since high tides are needed for tidal energy there is not much hope in using it for commercial reasons.
- Geothermal - Geologists call the earth's hot interior magna. Scientists believe radioactive materials in the earth keep the interior hot. Uranium, potassium and radium are three radioactive minerals found in the earth's interior.

Suggested Learning Experiences

- graph an important fact about each, for example, graph the number of oil wells drilled in the U.S. between 1950-1980, show major coal deposits in North America or diagram the earth's interior to understand geothermal energy.
- Plan a solar science week. Concentrate on solar energy and the sun as the main source of energy flow to the earth. Each day explore one fact about the sun. Explain the fact and show your knowledge through demonstrations, discussions, charts and diagrams.
- Observe the sun's motion via a 5" radius circle on a flat surface in direct sunlight. A 10" stick must be placed in the middle of the circle. Mark the stick's shadow on the circle hour by hour along with the measurement of the angles between each shadow mark. From this observation a student can infer if the sun changed position in the sky, and how many degrees the sun moved each hour.
- Conduct an experiment to observe the angle of the sun's rays to the amount of heat the earth gets. First, fill 2 boxes with sand or dry soil. Place a thermometer in each with the bulb buried slightly.

Taxonomy

10.1.9 (cont.)

- Nuclear - This form of energy is derived from the nucleus of an atom. Protons and neutrons make up a nucleus. When they rearrange their position in the atom fusion or fission occur.
- Fossil fuels - Possess forms of potential chemical energy such as coal, oil and natural gas. Fossil fuels are made up of carbon atoms which when burned produce energy.

10.1.10 The greatest capacity of earth's energy flow comes from the sun. 173 trillion kilowatts, 173Tkw, of power beams toward earth's upper atmosphere daily. Solar energy diffuses in its journey to the earth's surface. 30% is reflected by the atmosphere and 47% is absorbed by the atmosphere, the land and oceans. Approximately one half of the sun's energy reaches the earth's surface where another 23% is used to evaporate water. The remainder of earth's vital processes use less than one percent of the total energy power released by the sun's rays.

Compared to the sun's powerful energy force, fossil fuels (coal, oil, natural gas) appear rather insignificant; however, 90% of our present energy needs come from fossil fuels or chemical potential energy. Part of the earth's energy flow can be attributed to geothermal, tidal and nuclear energy.

10.1.11 Solar energy is radiant energy. The most common forms of solar energy are visible light and ultra-violet radiation. Two essential chemical reactions occur because of solar radiation - ozone production and photosynthesis.

Suggested Learning Experiences

- Record temperature of the thermometer. Position one box so the sun's rays strike it on a slant. The second box should be placed on a slant so the sun's rays strike it vertically after 15 minutes. Record the temperatures. Answer questions related to the seasons of the year, and the sun's energy potential in relation to its position to the earth.
- Discuss electron movement when a spark occurs after petting a cat or walking across a rug and touching something metal.
- Compare the charge of one electron to the number of electrons in one coulomb. Why is it simpler to measure electric charge in coulombs?
- What form of energy is lightning? Is lightning electricity?
- Conduct experiments which show how parts of an electric circuit are connected, how series and parallel connections differ, what happens to current when resistance is increased or when the voltage is increased, what happens in a short circuit and how a fuse safeguards a circuit. Recent science textbooks describing how electrical energy is supplied to our homes offer the specific procedure.

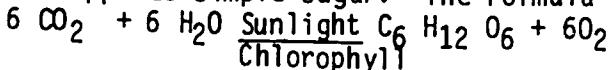
Taxonomy

10.1.11 (cont.)

Ozone, O_3 , forms when an oxygen molecule splits into 2 oxygen atoms and one of these atoms combines with another oxygen molecule. In the earth's upper atmosphere ozone forms a protective coating against ultraviolet radiation.

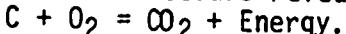
Photosynthesis is common since it is the major source of food energy for human beings and animals. The photosynthesis reaction can be described as: Carbon dioxide (CO_2) + Water (H_2O) + Energy

Carbohydrates ($C_x(H_2O)_y$) + Oxygen (O_2). The resulting carbohydrate molecule is found in plants. It supplies simple sugar. The formula is



The sun produces an array of nuclear reactions to send earth radiant energy. The nuclear reactions occur when "Bare hydrogen nuclei, protons, stripped of their atomic electrons by countless collisions, combine (fuse) to form helium. In the process some of the mass of the hydrogen is converted into energy." (Fowler, p. 107)

10.1.12 Over 300 million years ago the sun played an important part in the chemical reactions which occurred to form the fossil fuels. Through photosynthesis the sun helped huge amounts of vegetation to grow. When these plants died and decayed in the Paleozoic coal swamps an aerobic (air) bacteria attacked the decayed matter and released hydrogen as a gas. In time the heat and pressure derived from the hydrogen gas escaped and left carbohydrates which changed to pure carbon of coal. When coal is burned oxidation occurs releasing energy.

Suggested Learning Experiences

- Show the conversion of mechanical potential and kinetic energy to electrical energy when water is used to turn a turbine. Explain how electrical energy is delivered to the home and how it is finally converted to thermal energy to be used in doing work for us, e.g., heating water, toasting bread, etc.
- Explore the effects of fluorocarbons on the earth's ozone layer.
- Conduct an electric field plotting laboratory exercise to illustrate the effects of field action on a charge.
- Perform experiments to illustrate the conductive properties of various metals and their thermal effects.
- Calculate how much hot water is used per day in your home. Compare costs of heating it with oil, gas (natural or propane), wood and electricity.
- Compare various hot water systems for your home. Which is best suited for the future in light of present energy supply? Which system do you prefer?

10.1.12 (cont.)

Petroleum went through much of the same process as coal except hydrogen mixed with the carbon to form hydrocarbons.

10.1.13 Continuous sources of energy will come from the sun and the tides. Depletable sources of energy are chemical (fossil fuels), nuclear and geothermal. Although coal seems plentiful today it should be remembered that all possible sources of coal have been discovered. Oil has many reserves which have not yet been discovered. Natural gas, oil shale and tar sands are also depletable energy resources. Because nuclear energy uses uranium and thorium, both rare minerals, it is considered a depletable energy source. Although the use of geothermal energy has little popularity thus far, it is considered depletable since the available energy could be used faster than it takes to produce the heat in the earth's interior.

10.1.14 Electric energy must be converted before it can be used since it is in the form of electrical potential energy. This electrical potential energy is derived when electric charges are moved by electric forces. Work is done on the charge as it is moved against an electric field, and this energy is stored as electrical potential energy.

10.1.15 Vocabulary for electricity: (Fowler, p. 107)

- Electron - An elementary particle with a negative charge that orbits the nucleus of an atom. Its mass at rest is approximately 9×10^{-28} grams, and it compares to only a tiny fraction of the mass of an atom. Chemical reactions consist of the transfer and rearrangement of electrons between atoms.

10.1.15 (cont.)

- Proton - An elementary particle present in all atomic nuclei. It has a positive electric charge. Its mass is approximately 1,840 times that of an electron.
- Neutron - An elementary particle present in all atomic nuclei except for the most common isotope of hydrogen. Its mass is approximately that of a proton, but it has no electric charge. Neutrons are released in fission and fusion reactions.
- Coulomb - a large unit of charge.
- Ohm - a common unit of resistance.
- Ampere - a unit of measure for electric current. The charge flow per unit time. It is equivalent to a flow of approximately 6×10^{18} electrons per second.
(1 ampere = $\frac{1 \text{ coulomb}}{1 \text{ sec.}}$)
- Voltage - the potential difference measured between two points in an electric circuit field. The work per unit charge required to move an electric charge between the two points in an electric field.

10.1.16 Electricity usually is carried through wires made of copper or aluminum. Metal atoms are structured so that some electrons move freely from atom to atom. These free electrons moving from atom to atom form the current in a wire with the result being that electrical potential energy is delivered to the machine, appliance, etc. Which converts it to a useful form.

10.1.17 D.C. voltage is direct current voltage which plotted against time maintains a constant value and direction. A flashlight uses D.C. voltage.

A.C. voltage is alternating current voltage which changes in magnitude and direction.

10.1.18 Electrons move through wires and meet resistance. The number of electrons flowing past a given circuit in a conductor of uniform resistance will be determined by the applied voltages. Resistance, measured in ohms, accounts for electric energy loss. Wires that possess high resistance will dissipate (waste) the electrical potential energy of the electrons in the form of heat. Also, if large amounts of current flow through a conductor, the heat loss will increase due to more electrons meeting with resistance. A toaster is an example of a low resistance appliance.

10.1.19 Electric power can be considered as $P = IV$ when P = power, I = current, V = voltage. A unit of electric power is $P = \text{amps} \times \text{volts} = \text{watts}$.

10.1.20 To get electric energy to the consumer, three steps are taken: generation, transmission, distribution. Natural energy sources such as coal, oil and natural gas are burned to produce steam which then turns the steam turbine. The energy conversions go from chemical energy to thermal energy to mechanical energy where an electric generator converts mechanical energy to electric energy. Transmission lines carry the electrical energy to individual homes. Distribution is individualized for industry or private homes.

10. CONSERVATION OF ENERGY AND RESOURCES

Specific Objective 10.2: The student will gain an understanding of how supply and demand affects energy including its sources, patterns of usage, and predicted future outlook.

Performance Indicators	Science Objective	Suggested Evaluation
10.2.1 Calculate the demand for electrical energy in the U.S.	To obtain scientific data.	Results from a survey
10.2.2 State two main problems facing the supply of coal, oil and gas.	Identify scientific problem.	Debate
10.2.3 State 3 methods by which energy from coal can be supplied in the future.	Select validating procedures.	Essay questions
10.2.4 Predict the length of time the U.S. can rely on fossil fuels and uranium as energy sources.	Reason quantitatively.	Completion-type test

Taxonomy	Suggested Learning Experiences
<p>10.2.1 The demand for electric energy in the U.S. falls into four main areas:¹</p> <ul style="list-style-type: none"> • Transportation - 25.2% • Residential - 19.2% • Industrial - 41.2% • Commercial - 14.4% <p>In 1965 the U.S. used 15.3 quadrillion calories of energy. In 1974, 18.5 Q calories were used. A scientist will see the need for greater scientific advances in electric energy generation. Two thirds of the energy used to produce electricity is lost in the process.</p> <p>Electric energy is used in over 100 different</p>	<ul style="list-style-type: none"> • Conduct a scientific survey in your community to determine what percentage of electrical energy is used for transportation, residential, industrial and commercial. How does your community compare with the U.S. percentages? • How many kilowatts of electricity are consumed by your school per month? • Interview officials from utility plants. Try to determine where greater scientific technology is needed in the area of electric supply and demand.

Taxonomy

Suggested Learning Experiences

10.2.1 (cont.)

ways. The top 12 users account for 97% of the electricity consumed. Of these 12 the top 4 account for 71% and all are related to heat energy.¹ 12 major end uses of energy include:

• Transportation (fuel, excludes lubes & grease)	24.9
• Space Heating (residential, commercial)	17.9
• Process Steam (industrial)	16.7
• Direct Heat (industrial)	11.5
• Electric Drives (industrial)	7.9
• Feedstocks, Raw materials (commercial, industrial, transportation)	5.5
• Water Heating (residential, commercial)	4.0
• Air-conditioning (residential, commercial)	2.5
• Refrigeration (residential, commercial)	2.2
• Lighting (residential, commercial)	2.2

- Determine the percentage of carbon in different types of coal - liquite, bituminous and anthracite.
- Invite a geologist to talk about rock and mineral formation in North America. Tie in with questions about coal formation.
- Set up a panel debate. Resolve: that strip-mining of coal be escalated to meet energy demands. to coal, review the properties of sulfur. Research the chemical process which occurs when coal burns and releases sulfur. Discuss sulfur in relation to acids, and the pouring acid rain problem in North America? What are the many uses of sulfuric acid?
- Scientists have determined that coal gas will have a lower density than natural gas. From the definition of density, $D = M/V$ (where M is the mass of a sample and V is its volume), write an expression relating pressure (P) and volume (V) of a gas at constant temperature.

¹ Figures are based on the only reported thorough study made by the Stanford Research Institute for the U.S. Office of Science and Technology, 1968.

Taxonomy	Suggested Learning Experiences
10.2.1 (cont.)	<ul style="list-style-type: none"> <li>• Cooking (residential, commercial) 2.2 <li>• Electrolytic Processes (industrial) <u>1.2</u> <p style="text-align: right;">TOTAL 97.1</p>
10.2.2	<p>Some main problems facing the coal supply are:</p> <ul style="list-style-type: none"> <li>• Environmental opposition which states that high sulfur coal cannot be burned. Scientists and other experts are still in the early stages of developing technology to eliminate the sulfur from the gas which is emitted from burning coal. <li>• Opposition to strip mining. <li>• Lack of safety in coal mining underground. <li>• An historical lack of interest and future development in the coal industry. <li>• Lack of miners. <p>Problems facing oil and gas supply are:</p> <ul style="list-style-type: none"> <li>• Fewer explorations for oil and gas reserves. <li>• Lack of drilling rigs available. Larger more advanced rigs are needed for drilling in deeper ocean pools. <li>• Expense and time to develop techniques for drawing out the secondary and tertiary oil reserves in existing oil wells. <li>• Environmental protection. As noble as their intentions might be, environmentalists have lessened the supply of oil and gas. <ul style="list-style-type: none"> <li>• Pretend you are a piece of coal; write a story about how you were formed. Include your initial environment and the changes you went through. You can get your information from an encyclopedia or any resource book. <li>• Make a facsimile of a fossil. Grease a 6 X 9 inch pan. Mix plaster of paris in a separate container until it is about the consistency of putty. Then pour into the greased pan. Press a good-sized leaf into the surface of the plaster. As soon as the imprint is clear, remove the leaf gently and let the imprint dry. Make several different fossils using different types of leaves. Paint the dried plaster with black, water-based paint and display as coal fossils from the Carboniferous era. <li>• Examine lignite and coal samples under a microscope. From the coal samples, find a sample of peat, lignite, bituminous and anthracite and arrange according to their hardness. Take a piece of coal and scratch it, taste it, and with the teacher's help, burn it in a barbecue pit.

10.2.3 If science technology progresses and shows that energy can still be derived from the old resources but in a better, cleaner manner, the U.S. will be able to produce her needed supply. Some scientific technology now underway is:

- Gas from coal - Coal gas has a low energy density, producing about 80 calories per cubic foot as compared with the 250 calories per cubic foot of natural gas. The future users will be industry and electric power plants.
- Synthetic natural gas from coal - SNG needs a great deal more technology to perfect the methane gas which is the desired end product.
- Oil from coal - The desired end product from research in this area is solvent refined coal, SRC. SRC is a solid which can easily be melted and used as a liquid fuel. The combination of high pressure, high temperature and a solvent added to coal produces SRC, a liquid. Ash and sulfur can easily be filtered out and the solvent evaporated with the resulting SRC.

10.2.4 Based on the rate of consumption in the 1970's, the supply of fossil fuels will quickly deplete if the demand remains the same.

- Oil - With the hope that secondary and tertiary drilling will produce more oil from U.S. wells, the supply will last for 35 years. If oil is used from foreign sources, the U.S. supply will last longer; however, the world oil supply is predicted to last less than 35 years.

Taxonomy	Suggested Learning Experiences
<ul style="list-style-type: none"> • Natural gas - The supply of natural gas is expected to last 13 years if we continue to consume it at the present rate (22.9 trillion cubic feet in 1973). • Coal - At the rate in which the U.S. is using coal today it will last for 693 years. It is difficult to judge the consumption pattern since it has jumped up and down since the early 1960's. If coal is used to produce gas and oil, the supply will deplete even sooner. • Uranium - At the present rate of consumption uranium will last for 27 years. Scientists see this as enough time to develop a new nuclear energy fuel, for example solar generated electricity or fusion. This 27 years also counts on fresh uranium U₃O₈ used to refuel reactors. Chemists feel plutonium which is generated in the fuel rods of a nuclear reactor is recyclable. Uranium supply would be prolonged in this case. 	

10. CONSERVATION OF ENERGY AND RESOURCES

Specific Objective 10.3: The student will identify the interrelationship among energy, ecology and economic problems and solutions in terms for the consumer.

Performance Indicators	Science Objective	Suggested Evaluation
10.3.1 Identify 4 environmental problems during energy usage.	Identify a scientific problem	Results from experiments
10.3.2 Detail 2 major environmental threats to clean air from energy usage.	Ecology	True and false test

Performance Indicators	Science Objective	Suggested Evaluation
10.3.3 Describe 2 major environmental threats to water use from energy consumption.	Ecology	Research paper
10.3.4 Explain 2 major environmental threats to land use from energy consumption.	Ecology	Essay exam
10.3.5 State the 2 major environmental threats to the oceans from energy consumption.	Ecology	Report from a special project
10.3.6 Predict 2 major environmental threats from nuclear energy usage.	Ecology	Completion-type test
10.3.7 Detail the environmental threats posed by coal mining.	Minerals and rocks	Matching test
10.3.8 Express the environmental threats derived from uranium mining.	Minerals and rocks	True and false test
10.3.9 Write the environmental threats due to oil drilling.	Ecology	Research paper
10.3.10 Describe 3 possible solutions to the "energy usage-environmental threat" issue.	Reason quantitatively	Multiple-choice test

Taxonomy	Suggested Learning Experiences
10.3.1 The overall ecological problems associated with energy usage are in <ul style="list-style-type: none"> • Air pollution • Water pollution • Land abuse • Water abuse • Radiation • Hazardous waste disposal <p>Most of the population understands that the environment needs attention as the U.S. attempts to</p>	<ul style="list-style-type: none"> • Conduct a water pollution experiment. Collect water samples from streams, ponds, puddles, etc. In class shake the sample and place 1 teaspoon on a separate labeled dish. Let the sample evaporate. Observe how much residue is left on the dish. Answer these questions: <ul style="list-style-type: none"> 1. How did the residue get there? 2. Is the residue harmful?

Taxonomy	Suggested Learning Experiences
10.3.1 (cont.)	supply energy.
10.3.2	The worse offenders of air pollution are the automobile and industry.
	<ul style="list-style-type: none"> • Automobile emits hydrocarbons, nitrogen oxides, carbon monoxide and lead. These air pollutants are referred to as photochemical smog since it is the sun's reaction to the hydrocarbons and nitrogen oxide that the pollutants are formed. • Industry produces sulfur smog mainly from companies which burn coal.
10.3.3	<p>Water is threatened by heating it and consuming it. Electric utility plants are major users of water as a cooling medium. Heated water from steam turbines returns to a stream, pond, lake or river. Marine life is affected by the change in temperature because the solubility of air varies with temperature.</p> <p>The amount of water used to generate electricity is staggering. In an average electric energy plant 16,000 gallons of water per second are used for cooling. Scientists predict that 350 billion gallons of water per second are used for cooling. Scientists predict that 350 billion gallons per day will be needed by 1990. This number represents over 3/4's of the available fresh water in the U.S. today. Seawater may be used in the future. Recycled water is a possible alternative to using fresh water.</p>
10.3.4	<p>The way land is abused for energy demands presents some major threats to the environment. Strip mining destroys the land surface and leaves it barren. Underground mining produces acid water which destroys marine life as it drains from a mine.</p>
	<ul style="list-style-type: none"> 3. What can be done to remove residue from water? 4. How does remaining residue contribute to the energy consumption and waste problem? 5. What will the water you collected be like in 10 years? 100 years? • Research ways in which water is purified. How does water purification use energy? • Test for air particles following these procedures. <ul style="list-style-type: none"> 1. Mass a piece of filter paper. 2. Place filter paper in selected sites (any place where dust collects). 3. After 3-7 days examine and mass filter paper. 4. Use a magnifying glass to note different sizes, colors and shapes of particles collected on the filter paper. 5. Put some distilled water in a beaker. Test the pH of the water with litmus paper and save. 6. Rinse particles off the filter paper into the beaker. Observe particles again under the magnifying glass. 7. Test the pH of the "dirty" water. Compare litmus paper with sample from clean water. 8. Make conclusions about airborne particles and pollution.

Taxonomy

10.3.4 (cont.)

Using present day wild land for commercial use presents another threat to the environment. The mining and on-site processing to refine resources or produce energy are choices of the future.

10.3.5

Using the oceans to transport oil poses threats of oil spills. Offshore drilling and oil rigs present threats to fisheries, spawning grounds and commercial fishermen. The related activities surrounding oil drilling (larger ports, refineries, increased population) are also environmental consideration for the sake of energy.

10.3.6

Many scientists feel the use of nuclear energy will solve pollution in the air and on land; however environmental threats are possible through

- Radioactive materials at the reactor
- Radioactive materials at the fuel processing and reprocessing plants
- Radioactive waste at the disposal site
- Nuclear power plant accidents

10.3.7

It was expected the U.S. would mine 830,000,000 tons of coal in 1980. The land surface, disrupted by strip mining, appears to be the most popular form of mining coal. Strip mining is similar to plowing except much deeper. A trench is dug and the coal removed. Another trench is dug to catch the soil on top of the coal. The amount of soil turned is vast and it leaves the soil sterile. Tree roots and grasses die, erosion occurs from wind and water; lakes and streams are filled with unwanted silt; runoff contains sulfur which if concentrated destroys plants and animals. Flat or hilly, the topography is destroyed from strip mining if steps are not taken to restore the land to its original state.

Suggested Learning Experiences

9. Check the Ph of a pool before and after a heavy rain.

- Hold a "Get To Know Your Oceans" Fair. Make displays of plant and animal life which live in the ocean. Show how pollution threatens these forms of life. Review ocean currents and how it relates to meteorology. Keep in mind how a healthy ocean benefits the world.

- Survey your community for ways in which the environment is threatened because of energy (obtaining the resources, processing raw materials, distributing and consuming). Publish results in a local newspaper.

- Discuss the molecular structure of a gas like radon. Why is it heavier than air?

- Conduct a controlled experiment with shell fish or pollywogs. Keep some in clean water and some in polluted water. Observe for signs of failing health. Relate this experiment to oil spills in bays, streams and estuaries.

- Devise a mock Arctic Region with ice. Follow with an oil spill. Notice what happens to

Taxonomy	Suggested Learning Experiences
10.3.7 (cont.)	<p>Cave-ins present problems with underground mining. Rural use of caved in land is lost. Ground water levels are threatened by acid water.</p>
	<p>Coal fires occur in underground mines consuming other valuable resources while it burns.</p>
	<p>More environmental threats occur in processing coal. Mineral waste comes chiefly from washing it to remove impurities. Vast heaps of coal waste surround urban areas. The dust spreads into the air causing pollution.</p>
10.3.8	<p>Uranium is mined in the same way as coal, underground and on the surface. Since uranium is radioactive another environmental threat enters the picture. Radon, a radioactive gas heavier than air, is released in uranium mining. Both the miner and the environment are threatened from overexposure to radon.</p>
10.3.9	<p>Oil wells cause damage when accidents (blow outs or pipe breaks) occur. Beaches and shoreline are washed with oil which takes years to clean. The greatest threats to marine life occurs when oil spills enter shallow coastal areas, salt marshes, estuaries and bays. It is in these areas where marine life begins.</p>
	<p>Oil spills on ice can have serious effects. It causes the ice to warm and melt. On a large scale hundreds of melted ice acres upset the delicate environmental balance in the Arctic region. Meteorologists now state that changes in the Arctic ice cover will have large scale climatic alterations (wind path, rainfall, drought) for the Northern Hemisphere.</p>

the ice. Make conclusions about all spills in the Arctic. Do you agree with meteorologists that oil spills in the Arctic can have long range climatic effects?

- Offer a prize for the best idea related to a clean environment. A student might think of an invention or develop a model of a gadget to keep the environment clean. Be creative.
- Make an electrostatic precipitator to demonstrate how particulates can be removed from power plant waste gases.

<u>Taxonomy</u>	<u>Suggested Learning Experiences</u>	
10.3.10 Some possible solutions to the environmental problems caused by energy usage are:	<ul style="list-style-type: none"> • Burn clean fuels. Natural gas is the cleanest but in shortest supply. Coal is the dirtiest. • Remove sulfur from fuels. Many large companies are developing ways to remove sulfur dioxide from the power plant wastes. More scientific technology is needed. • Develop other sources of energy. (Described in greater detail in 10.5) and conserve. 	
<hr/>		
10. CONSERVATION OF ENERGY AND RESOURCES		
<u>Specific Objective 10.4:</u> The student as a consumer will make an individual plan of action to help in solving problems presented by energy shortages, threats to the environment and related concerns.		
<u>Performance Indicators</u>	<u>Science Objective</u>	<u>Suggested Evaluation</u>
10.4.1 Suggest 3 short-term methods to use less energy.	Obtain and interpret requisite data	Experiment results
10.4.2 Explain 3 long range methods for using less energy.	Obtain and interpret requisite data	Checklist
10.4.3 Explore energy efficiency in terms of stopping energy shortages.	Reason quantitatively and symbolically	True and false questions
10.4.4 Detail the concept of irreversibility and energy.	Discontinuities of matter	Multiple choice questions
10.4.5 Describe a heat engine and energy conversion.	Heat and simple kinetic energy	Completion type test
10.4.6 Explain the Laws of Thermodynamics with energy efficiency.	Relation of structure of matter to behavior	Essay questions

Taxonomy	Suggested Learning Experiences
<p>10.4.1 Short term methods for using less energy are all related to individual comforts and attitudes.</p> <ul style="list-style-type: none"> • Use less gasoline. Lowering the speed limit from 65 mph to 55 mph has shown that gasoline can be saved. Closing gas stations on Sunday, driving less and carpooling are other measures. 	<ul style="list-style-type: none"> • Conduct a "Day Without Energy." The rule is do not consume any commercially-produced energy for as long as you can. Set up a points list for the energy used, for example, 500 points if you rode in a car out of town. The person using the least amount of energy wins.
<p>10.4.2 Long range methods for using less energy are</p> <ul style="list-style-type: none"> • In transportation which has 2 basic jobs - to move people and things. Moving people uses 60% of transportation's total energy. Long range plans for less energy usage in transportation are: <ul style="list-style-type: none"> - Improve engine efficiency to get more miles per gallon of gasoline. - Increase loads as in carpooling. Also avoiding overlaps in scheduling of airplanes, trucks and trains. - Switch from high to low energy intensive modes of doing things. Use a bicycle or walk instead of a car. • In reducing home comfort levels <ul style="list-style-type: none"> - Heating and cooling. Thermostats can be lowered, insulation improved, sealing a house to prevent escape of heat through the roof, windows and cracks. - Lighting can be reduced in many instances at home. Careful attention to turning off lights is all that is needed. - Appliance inefficiency. Many of the household appliances used in the average American home are inefficient energy users. Home air conditioners are a prime target for efficiency. • In industry. Much of what has been described in transportation and the home can also be applied to industry. However industry can also learn 	<ul style="list-style-type: none"> • Prepare a conservation checklist to help you determine how well your home is conserving heat and coolant energy. • Go on a field trip to a home construction site. Observe the insulation and notice how it is installed. Take notes on the design of the house, its orientation, and construction methods in regard to energy conservation. • Practice reading the watt-hour meter gauge. • Keep a record of the watt-hour meter readings at your home for a week. Find out your daily average consumption, total weekly consumption and the average amount of energy used by each member of your family for one week. Record your findings in a bar graph. • Have a scavenger hunt in school to see how many electrical appliances there are. Try to guess which 5

Taxonomy

Suggested Learning Experiences

10.4.2 (cont.)

greater efficiency through improved production technology. Using waste materials as fuels and recycling are two strategies which industry could pursue to save on energy use. Smoothing out the peaks and valleys of electricity demand can also save on energy usage overall in industry.

10.4.3

More consumers are demanding energy efficiency or the most for the least. In scientific terms energy efficiency is the ratio of the useful work or energy that is derived from the conversion to the work or energy put into it.

$$E = \frac{E_0}{E_I} \times 100 \quad \text{when} \quad \begin{aligned} E &= \text{efficiency} \\ E_0 &= \text{energy out} \\ E_I &= \text{energy in} \end{aligned}$$

The efficiency of conversions to and from electric energy is high; large generators have efficiencies of near 100%. Heat engines have efficiencies that are less than 50%. Automobile engines are 25% efficient or less. Considering that 1/4 of all energy used in the U.S. is for transportation and that engines are only 25% efficient, the need for energy efficiency products becomes more demanding.

10.4.4

The idea of irreversibility states that all natural energy conversions from one form to another cannot be completely converted back to its original form. Heat energy is produced in energy combinations and is lost. It is this "heat tax" or the amount of energy lost that scientist measure the efficiency of an energy conversion device. Examples of heat loss in energy conversions are:

- In conversions to and from mechanical energy, heat is lost through friction.

appliances use the most energy. Determine the efficiency of these appliances.

- Explain why the melting of an ice cube is an irreversible process even though it could easily be refrozen.
- Determine the cost of operating an air conditioner for a 24 hour period using the formula $P = IV$ and the cost of electricity for 1 KWh.

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10.4.4 (cont.)

- In thermal conversions, heat leaks out through the system.
- In electrical conversions, heat leaks out in the resistance.

10.4.5 A heat engine is any device which converts heat energy into mechanical energy. Although it wastes a great deal of heat, the heat engine converts over half of the energy demands in the U.S., a definite proof of inefficiency. The important work of a heat engine is

- to heat gas by combustion
- to drive a piston
- to exhaust the gas at a lower temperature

The inefficiency associated with the process of converting heat energy to mechanical energy is explained by the law of physics in the Second Law of Thermodynamics.

10.4.6 It is in the Second Law of Thermodynamics that energy efficiency is considered. An interpretation of the actual law can be paraphrased as "in any conversion of energy from one form to another some of it becomes unavailable for further use." More precisely the law states no device can be constructed, which operating in a cycle (like an engine) accomplishes only the extraction of heat energy from a reservoir and its complete conversion to mechanical energy (work). Simply stated, "You can't build a 100 percent efficient heat engine."

10. CONSERVATION OF ENERGY AND RESOURCES

Specific Objective 10.5: The student will become aware of alternative sources of energy and their use for the future.

Performance Indicators	Science Objective	Suggested Evaluation
10.5.1 Describe 3 new methods of obtaining energy from old sources.	Heat and simple kinetic theory	Research paper
10.5.2 Detail how hydrogen can be used as an intermediate source of energy.	Nature of chemical reactions	Completion-type test
10.5.3 Explain the fuel cell and energy production.	Nature of chemical reactions	True and false test
10.5.4 Explore the possibilities of wind power as an alternative.	Elements of atmospheric science	Multiple choice test
10.5.5 Investigate 3 ways of producing energy from photosynthesis.	Diversity of living things	Results from experiments
10.5.6 Review geothermal power as an alternative for the future.	Internal constitution of the earth	Essay exam
10.5.7 Explain how power from the sun will be harnessed.	Stars and galaxies	Matching test
10.5.8 Predict how fusion will play a role in energy supply.	Nature of chemical reactions	Research reports

Taxonomy	Suggested Learning Experiences
10.5.1 Three new methods of obtaining energy from old sources are: • MHD (magnetohydrodynamic) generator which would cut some of the steps which converts chemical energy to electric energy. The MHD generator is	• Discuss the steps needed to convert chemical energy to electric energy. How is chemical energy converted to electrical energy in an automobile.

Taxonomy

10.5.1 (cont.)

designed to burn a fuel (coal, gas, oil) and to produce hot combustion gases which are ionized inside the generator. The action of the ionized molecules converts thermal energy directly to electric energy which bypasses the steam turbine and generator steps of a conventional system.

- Heat engine bottoming cycle. Considerable attention is being given to the heat engine bottoming cycle or to the heat wasted at the end of the heat energy cycle. The steam exhausted from a steam turbine may be 300-500 Fahrenheit degrees, a considerable amount of heat energy. This hot exhaust can boil a low-boiling point liquid like ammonia and cause it to expand. The high pressure vapor can then turn a small turbine to generate more electricity.
- The Liquid Metal Fast Breeder Reactor (LMFBR) is an upgraded version of nuclear power which in effect creates or breeds its own fuel. This would prolong the use of uranium as a non-renewable resource. Plentiful, inexpensive electricity would result. On the other hand LMFBR's would produce an extremely dangerous radioactive poison.

10.5.2 Hydrogen can be stored by a simple technique and would then be used to produce electricity. Through the process of electrolysis hydrogen can be separated from oxygen in a water molecule. The energy it takes to separate hydrogen and oxygen can be reclaimed by burning the hydrogen. Power plants which produce hydrogen from water could produce large amounts of electricity.

Suggested Learning Experiences

- Diagram a steam engine which shows how steam under pressure enters a cylinder and pushes a piston upward. Relate the diagram to the heat engine bottoming cycle and heat waste.
- List several actual effects, both beneficial and undesirable of the steam engine and of the gasoline internal combustion engine. How could the undesirable effects be changed to help energy use?
- Study an energy-level diagram for the hydrogen atom. Review the Rutherford-Baehr model to show the existence of stable electron orbits and compare this model to present day atomic concepts. Explain the emission spectra of the hydrogen atom. Why does the study of the hydrogen atom help understand future energy sources?
- Design a chart to show some developments in nuclear science and technology since 1896 when H. Becquerel discovered unstable (radioactive) atoms.
- Perform an experiment on electrolysis of water. Relate the experiment to hydrogen storage.
- To better understand how a fuel cell works review the battery and how it

TaxonomySuggested Learning Experiences

10.5.2 (cont.)

mounts of electricity. Because it is a very light gas hydrogen presents some problems in storage, for example, it diffuses into metals and weakens them.

10.5.3 A fuel cell is a device that generates electricity from chemical energy. It is something like a battery except that the chemical energy is continuously fed rather than being stored. A single fuel cell does not hold a great deal of power; however, a mass of fuel cells can be connected to build up power levels of 100 Mw Megawatts or greater. Fuel cells are efficient, quiet and produce no air pollution.

10.5.4 Wind carries much energy. The winds of the North American Continent average 100 billion kilowatts, about 5 times the U.S. demand for power. With the use of aeroturbines there is a possibility of generating more electricity than is needed. The drawback with wind power is the unreliability. Technology has invented a system which would store hydrogen and then provide electricity from that hydrogen by using fuel cells to regenerate electricity.

Wind power is also being tested on ships. Germany and Japan have designed a Dyma-Ship with stainless steel sails and hydraulically turned masts. Saving on oil to transport huge ocean going ships could be a considerable amount.

10.5.5 Much of the organic materials (newspapers, food and agricultural waste) used in the U.S. pose a solid waste problem. Attention to use of this photosynthetic energy as an energy source for the country

converts energy.

- Observe a weather map on television or in the newspaper and predict the wind direction that should accompany the incoming weather.
- Record the wind patterns in your community for 2-3 weeks. Discuss the possibility of harnessing wind power to produce energy. Check a wind pattern map.
- Sketch the mechanical structures of a windmill. Make up problems to show how many kilowatts of power are produced from a windmill.
- Build a pyrolytic converter which can change combustible waste into fuel. Answer questions such as
 - What is meant by pyrolysis?
 - What fuels are produced in a pyrolytic converter.
 - What wastes produce the best fuels?
- Build a model of the earth's interior showing geothermal energy sources. Answer questions such as
 - What kinds of potential sources lie underground?
 - Is geothermal energy related to geographical locations?
 - What examples of geothermal energy occur on earth?

Taxonomy10.5.5 (cont.)

is underway.

- The pyrolysis process in California heats organic waste in an oxygen free atmosphere to produce oil. In St. Louis garbage is burned with coal in the power plants. Hydrogenation is another process which converts organic waste to usable fuel. Producing methane is one of the simplest ways of obtaining energy since methane gas occurs naturally. Methane is produced by anaerobic (oxygen-free) digestion of organic materials by micro-organisms.
- Energy farming refers to the possibility of growing plants for their energy content. Industrial alcohol has in the past been produced from cereals and molasses. Sugar cane is an ideal plant for energy conversion. The rubber plant offers an interesting potential source of energy since it produces a pure hydrocarbon and not a carbohydrate containing oxygen that requires fermentation.
- Trees as fuel. Some contend that tree farms could serve as a primary source of fuel for energy production. As trees grow they serve to prevent erosion, provide recreation areas, supply fertilizer from the wood ashes and are low in sulfur.

10.5.6 Geothermal energy is presently in use providing San Francisco with half of its electricity. These California plants use dry steam, steam so hot that there is no water in it. The steam is fed into conventional steam turbines.

Suggested Learning Experiences

- Appreciable amounts of the uranium isotope U^{233} do not occur outside the laboratory; U^{233} is formed after the thorium nucleus Th^{232} has captured a neutron. Give the probable steps leading from Th^{232} to $^{92}U^{233}$.
- Why are the high temperatures produced by the explosion of a fission bomb necessary to initiate fusion in a thermonuclear device?
- With the help of a physics textbook demonstrate a model of a nuclear chain reaction.
- Construct and experiment with a solar collector that uses air to transfer the sun's energy to usable heat.
- Take a field trip to the site of a solar collector. Review how solar energy is stored for future need.
- Write an essay on
 - the various ways a citizen can help assure that technological innovations will be made and used in a manner benefiting society as a whole.
 - the responsibilities of scientists to society.

Taxonomy

Suggested Learning Experiences

10.5.6 (cont.)

Large amounts of thermal energy are available in wet steam or dry rocks; however, the technology to utilize these sources of energy is not fully developed. Besides generating electricity geothermal energy can be used to heat and cool homes and industry. A water supply can also be obtained from geothermal sources.

- Research how the sea would be the fuel source for breeder reactors using fusion.

10.5.7 Energy from the sun is abundant, however, the problem is in storing it for necessary use.

- Heat energy is the most simple way to convert the sun's radiation. Much is being done to harness the sun's warmth in homes and industry. Hot water storage, heated rocks and salts which melt and solidify are techniques presently underway. Most scientists see large scale application of solar heating and cooling in the future.
- Solar cells (photovoltaic cells) are a sophisticated technique for converting radiant energy directly into electronic energy through the photovoltaic process (in striking certain materials solar radiation is absorbed and causes a separation of the electrons from the atoms).

The high cost of producing one solar cell hampers commercial use. One experiment is using solar cells in the roof of a residence at the University of Delaware and M.I.T. in Boston.

- Central power stations are a way of harnessing the sun's energy. Scientists are suggesting that a large array of solar cells be put into orbit to collect and convert solar energy and beam it back to earth by microwave. Because of its constant exposure to sunlight a satellite solar array could be expected to receive at least 6 and maybe as much as 15 times more energy per square foot than

10.5.7 (cont.)

a ground location. The major drawback is in the cost of producing solar cells from silicon. Cadmium is one less expensive alternative to silicon.

- Solar energy farms are an idea which proposes to trap and focus solar radiation by rows of transparent collectors, pump the heat to a central plant, generate steam, and produce electricity in the conventional manner. The core of the system is in the collector where liquid sodium will carry the heat energy to the generating plant by being enclosed in a pipe that has a very efficient absorbent coating on it. To increase the amount of energy collected, there is a curved mirror under the pipe that focuses sunlight on the pipe. All this is enclosed in a vacuum to reduce heat leakage.

10.5.8 Fusion is a big if for scientists who are considering energy sources for the future. The breeder reactors give promise of fuel for as long as thousands of years if the proper technology is developed to tap the nuclear energy of light nuclei. The biggest problem facing fusion is to hold enough deuterium together long enough and get it hot enough. The sea would be the fuel source.

SOME SUGGESTED ACTIVITIES FOR THE GIFTED AND SLOW LEARNERS OF SCIENCE

Gifted

- Develop a chart showing what products the Consumer Product Safety Commission has tested in the last year. Write a report on the results of the test and describe how science played a part in determining the results.
- Research the role of a physician, chemist, nutritionist, microbiologists and pharmacologists in the Food and Drug Administration. What strong scientific background is needed to perform these jobs? Which seems most appealing to you?
- Design an experiment to test the solubility and acidity of common over-the-counter drugs. Set up certain standards for the drugs you test. Convey results in a well written report.
- Write a science fiction story. Deal with the consumer in the year 2,050. Will he/she use a great deal of science technology for day to day chores. How could science improve the future consumer's life?
- Diagram the present automobile engine. Imagine ways in which the automobile may operate without oil or gasoline. Rediagram the auto design and explain the science principles you employed to make the automobile operate.

Slow Learner

- Collect pictures of aspirin bottles, cleaning fluids, detergents, etc. Bring in examples of bottles and packages from home. Explain how the products are packaged for safety.
- Develop a chart with the student's names in class. Put a mark after each name during classes on safety in which the student suggests ways to practice safety at home.
- Show how salt and baking soda can put out grease fires at home.
- Test for solubility by showing how clothes detergent acts in water. Some brands will form suds. Biodegradable brands will not.
- Do experiments with the many uses of a product such as baking soda for indigestion, absorbing odors and for cleansing.
- Conduct experiments on acidity with litmus paper. Use common goods and household items.
- Show how air affects food products through browning on apples, bananas and papaya.
- Test for egg freshness with a 2 day old and a 2 week old egg. Relate how oxygen deteriorates fresh food.

SOME SUGGESTED ACTIVITIES FOR THE GIFTED AND SLOW LEARNERS OF SCIENCE

Gifted

- Imagine ten energy issues which the U.S. will face from now until 1990. Refer specifically to energy usage, resources and the impact on the environment. If you were the chief scientist to the Energy Commission, what steps would you recommend the U.S. follow?
- Develop an experiment to show the entrophy change of ice, water and the universe.
- Construct a solar collector model. Determine the number of BTU's collected. Describe how heat is transferred to space and water.
- Determine the chemical composition of fossil fuels such as coal and oil before and after burning. What by-products result from burning? Which are harmful?

Slow Learner

- To better understand that energy is a form of work perform arm and leg exercises or turn on a lightbulb. Explain how energy is used.
- To explain potential and kinetic energy secure a huge box. Allow 2-3 students to stand very still in the box as an example of potential energy and 2-3 other students to run around the box as an example of kinetic energy. Relate this to a piece of wood as potential energy and when it burns - kinetic energy.
- Depending on the level of understanding have students list sources of stored and moving energy.
- On a cold day allow students to hold their hands out the window. After 5 minutes close the window and warm hands near heat scurce. Students should understand that a heated building gets warm from sources other than the sun. If possible study the heat source in your school.
- Show picturesque, colorful diagrams of the earth's interior. Point out that heat is inside as well as outside the earth.

SOME SUGGESTED ACTIVITIES FOR THE GIFTED AND SLOW LEARNERS OF SCIENCE

Gifted

- Do an indepth study of the world energy resources. By a color code on a world map indicate where oil, coal, gas and uranium are found. Is there a concentration of resources in certain parts of the world?
- Agree or disagree that the gas turbine and external combustion engines may become automobile options for the 1990's.
- Create diagrams which explain how the physical characteristics of the atmosphere (radiation, earth rotation, topography) affect air pollution.
- Develop an experiment to produce methane. Relate how methane can be used to lessen the worry surrounding energy and the ecology.

Slow Learner

- Invite someone from the Lung Association to conduct air pollution tests.
- Plant flower seeds. Watch them grow. Relate the plant growth to energy and the need for the sun in every day life cycles.

mathematics

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The Consumer Citizenship Curriculum Guide for Science has been developed to help Mathematics teachers incorporate some parts of the Rhode Island Consumer Education Curriculum Guide in their subject matter area. All of the objectives covered in the R.I. Guide have not been included in this Mathematics Guide. A Grid may be found in the Appendix. It gives a detailed picture of the objectives chosen for Social Studies, English, Science as well as Mathematics. Hopefully, as the student moves through these four subject matter areas the objectives will be adequately covered. The above average Mathematics high schooler may not be challenged by the performance indicators and learning experiences developed in the Mathematics Curriculum Guide; however, students with difficulty in Mathematics will profit from the real life experiences which are offered. For the above average student refer to the section, Mathematics for the Gifted, which follows component 10. The R.I. Guide does not assign numbers to any of the components or specific objectives; however, in this Mathematics Guide we have done so.

The following goals of Mathematics Education have been selected from those presented by the National Council of Teachers of Mathematics in An Agenda for Action: Recommendations for School Mathematics of the 1980's.

School Mathematics must focus on problem solving where the student can gain experiences in computational skills and in selecting and matching strategies. Problem solving must strive to apply Mathematics to fundamental concepts. Basic skills in Mathematics should contain the ten basic skill areas which are 1. problem solving 2. applying Mathematics in everyday situations 3. alertness to the reasonableness of results 4. estimation and approximation 5. appropriate computational skills 6. geometry 7. measurement 8. reading, interpreting and constructing tables, charts and graphs 9. using mathematics to predict and 10. computer literacy.

Mathematics students should learn communication skills, logical reasoning, information processing and decision making as well. Full advantage must be taken of calculators and computers.

How to Use This Guide

1. Study the Guide format which gives the main component, the goal and specific objectives.
2. Each specific objective lists performance indicators, the skill(s) used and a taxonomy to help teachers understand the consumer knowledge related to the performance indicator.
3. A section for the gifted follows component 10.

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Goal: Understanding that credit properly used is a tool to reach economic goals.

Specific Objective: 2.2 The student will recognize types, sources and costs of credit for different purposes.

Mathematics Contribution: If a consumer is to understand the full impact of credit, then a considerable amount of mathematical ability must be accomplished.

Performance Indicators

2.2.1 Compute the simple interest a borrower will pay on a loan for one year; six months; 3 months; 24 months, when the rate, principal, and time are given.

2.2.2 Given two loans with different Principals, Times and Interests, determine which has the lower rate.

2.2.3 For a promissory note, compute the total amount due at maturity when the principal, time and rate are given.

2.2.4 Compute the interest on a loan for a period involving a part of a year.

2.2.5 Compute the interest for time in days when the principal, rate and time are given.

2.2.6 Compute the interest for time in days by the banker's interest formula when the principal, rate and time are given.

Basic Skill(s)

Percent, time

Percent

Percent

Percent and fractions

Percent and fractions

Percent and fractions

Taxonomy

The simple interest formula is

$$\text{Interest} = \text{Principal} \times \text{Rate} \times \text{Time}$$

$$(I = PRT)$$
. Time = # mos./12 or
weeks/52.

$$R = \frac{I}{PT}$$

$$I = PRT$$

$$\text{Amount due at maturity} = P + I$$

$$I = PRT. \text{ Time} = \# \text{ days}/360 \text{ or}$$

$$\# \text{ days}/365.$$

The time is given as a fraction using 365 as the denominator.

The banker's interest method uses 360 days for the denominator. It also uses 12 months of 30 days each.
(Sometimes called ordinary interest)

Performance Indicators

2.2.7 Use a table to find the interest to the nearest cent.

Basic Skill(s)

Tables

Taxonomy

Interest tables show interest on \$100 for a 360-day year. To find the interest on any other amount:

- Locate \$100 for the desired rate and time.
- Find the number of hundreds of dollars in the principal by dividing the principal by \$100.
- Multiply the interest for \$100 by the number of hundred in the principal.

2.2.8 Compute the total payment made on an installment loan when the amount financed and the rate and time are given.

Percent

For installment credit you may receive the full face of the loan at once. This is called the "amount financed". The "finance charge" is the interest figured on the amount financed at an annual rate for the time you borrow the money. The total of the amount financed and the finance charge is repaid in equal monthly installments.

2.2.9 Compute the amount financed when the installment loan is made on a discount basis.

Percent

With a discount loan you receive the face amount less the finance charge.

2.2.10 Compute the monthly payments on an installment loan when a service charge is made in addition to the interest.

Percent

A service charge may be made to cover the lender's higher cost of making the loan. The sum of the service and the interest charge is the finance charge. On a discount loan, the finance charge is deducted from the face and you get the proceeds.

2.2.11 Determine the finance charge per \$100 of amount financed.

Division

Finance charge per \$100 of amount financed = $\frac{\text{Charge}}{\text{Amount Financed}} \times 100$

<u>Performance Indicators</u>	<u>Basic Skill(s)</u>	<u>Taxonomy</u>
2.2.12 Compute the real cost of a loan in terms of the percentage of interest charged for both "discount" type loan and an "add-on" type loan.	Percent	$R = \frac{2mI}{P(n + 1)}$ <p>when:</p> <ul style="list-style-type: none"> • R = annual simple interest rate • I = dollar cost of credit • m = number of payment periods in a year (12 if paying monthly) • n = the number of payments scheduled in total • P = the net amount of credit or principal advanced.

The above formula is an approximation but is adequate to answer the question. In a discount loan the discount charge and service fee is subtracted from the principal. You then receive the remainder, but pay back the full loan. In an "add-on" transaction (installment plans) you receive the full amount of the principal and the charges are added on.

4. BANKING SKILLS (Checking and Savings Accounts)

Goal: Understanding the role of banking and lending institutions as the bridge between savers and borrowers, those paying and those saving money.

Specific Objective: 4.4 The student will know the mechanics and responsibilities of maintaining a checking account.

Mathematics Contribution: All banking skills require a considerable degree of competency in mathematics.

<u>Performance Indicators</u>	<u>Basic Skill(s)</u>	<u>Taxonomy</u>
4.4.1 Complete a deposit slip; record accurately on a register; write	Addition and subtraction	Checking accounts afford an accurate record of payments.

Performance Indicators

4.4.1 (cont.)

a check and record on a check register.

4.4.2 Prove a checkbook balance, and reconcile a bank statement.

Basic Skill(s)

Addition and subtraction

Taxonomy

The monthly report of the bank (bank statement) should be reconciled with the check book balance. In order to do this the student must be aware of service charges and outstanding checks. The past balance + deposits minus the total checks + service charges equals the present balance.

Specific Objective: 4.5 The student will know how to develop a sound savings plan.

Performance Indicators

4.5.1 Compute simple interest paid annually.

4.5.2 Compute simple interest paid semianually, quarterly or daily.

4.5.3 Compute balance when interest is compounded.

Basic Skill(s)

Percent

Percent and fractions or decimals

Percent, division, addition, multiplication

Taxonomy

Simple interest is computed: $I = PRT$

The same formula is used.

$$A = \left(I + \frac{i}{n} \right) nt$$

when:

A = amount or final balance

P = principal or initial deposit

i = interest rate per year

n = number of times interest is paid each year

t = number of years money is deposited.

Performance Indicators

4.5.4 Compute compound interest using a compound interest table.

Basic Skill(s)

Reading compound interest tables

Taxonomy

250

The table shows the compound amount of \$1 for various rates and interest periods. For interest compounded annually the interest found on the table may be multiplied by the number of dollars in the principal. If the interest is compounded quarterly, use the figure on the table for four times the number of annual periods and one-fourth the rate. If the interest is compounded semiannually, you use the figure for twice the number of annual periods and one half the rate.

4.5.5 Define:

- Shareholder
- Stock certificate
- Dividend
- Par value
- Market price
- Broker
- Stockbroker
- Common stock
- Preferred stock

Terminology

- Shareholder - One who owns shares of corporation stock; a stockholder.
- Stock certificate - A paper issued to a shareholder which shows on its face the number of shares it represents.
- Dividend - Earnings distributed to shareholders of a corporation or to holders of participating insurance policies.
- Par value - The face value of a bond or stock.
- Market price - The price at which a stock is sold; the price or value of an item in the open market.
- Broker - A dealer in stocks and bonds or real estate.
- Stockbroker - One who buys and sells for others.
- Common stock - The ordinary stock of a corporation, paying no specified rate or amount of dividend.

Performance Indicators

4.5.5 (cont.)

4.5.6 Interpret a stock market report.

Basic Skill(s)Tables, fractions
and decimalsTaxonomy

- Preferred stock - Stock that gets first choice in distributed profits and a stated rate of dividend.

4.5.7 Determine the rate of income on a stock investment.

Percent

Prices are quoted in mixed numbers and written as a whole number and a fraction. The fraction is read as part of \$1. It helps to memorize the aliquot parts in order to compute the decimal equivalents of the fractions used in stock reports.

$$\text{Rate of Income} = \frac{\text{Annual Dividends}}{\text{Total Cost of Stock}}$$

4.5.8 Determine the proceeds from the sale of a stock.

Subtraction and addition

$$\text{Market Price} - (\text{Commission} + \text{Taxes} + \text{Fees}) = \text{Net Proceeds}$$

4.5.9 Determine the profit or loss from the sale of stock.

Subtraction and addition

$$\begin{aligned} \text{Net Proceeds} - \text{Total Cost} &= \text{Profit} \\ \text{Total Cost} - \text{Net Proceeds} &= \text{Loss} \end{aligned}$$

4.5.10 Determine the net income from rental property.

Subtraction and addition, percent

Consideration should be taken of number of shares, the purchase price, commission on the purchase, selling price, and commission, taxes and fees on the sale.

$$\text{Annual Rental Income} - \text{Annual Expenses} = \text{Annual Net Income}$$

Expenses would include taxes, repairs, insurance, interest, depreciation (given in percent), and other expenses.

4.5.11 Determine the rate of income on an investment in Real Estate.

Percent

$$\text{Rate of Income} = \frac{\text{Annual Net Income}}{\text{Cash Investment}}$$

Performance Indicators

4.5.12 Make out a deposit slip and withdrawal slip.

Basic Skill(s)

Blank forms

Taxonomy

Maintaining a balance.

5. COMPARISON SHOPPING FOR GOODS AND SERVICES

Goal: Understanding the nature of the basic economic problem of scarcity where people, with unlimited wants and needs, live in a world of limited resources.

Specific Objective: 5.1 The student will be able to differentiate between impulse buying and comparison shopping.

Mathematics Contribution: If the consumer is to perform the activities necessary to comparative shop, considerable skill is needed in several mathematical areas. Some possibilities follow.

Performance Indicators

5.1.1 Determine the unit price when:

- the unit prices are aliquot parts of \$1.
- the unit price is gained from a group price.
- the quantity or unit price is a mixed number.
- the price of an item is for a fraction of the unit.
- the quoted price is for a quantity expressed as a mixed number.
- the unit price is a ratio of the quoted price.
- the measurements are expressed in metrics

Basic Skill(s)

Multiplication

Division including fractions and decimals

Fractions

Fractions

Fractions

Ratios

Metrics

Taxonomy

Unit pricing is the price per unit of measure. Laws requiring unit-pricing are in effect in several states, although the laws apply only to larger stores. In some places unit pricing is voluntary. The information is often shown on unit price labels which are affixed on the shelves close to the products.

Unit price = price per item
measure or count

5.1.2 Determine savings when:

- buying in larger quantities
- buying in different size

Multiplication and

division

Percent and fractions

Sales do not always offer true savings. The consumer needs to be able to determine true prices and savings.

Performance IndicatorsBasic Skill(s)Taxonomy

5.1.2 (cont.)

containers

- sale price must be determined from
 - a percent reduction
 - a fractional reduction
- a nomograph is used to compare the cost of two canned goods

5.1.3 Estimate:

- volume of a cereal box
- weight of a fruit or vegetable
- length of a table
- price of an item with several costs involved
- area of a room
- height of a book case

Estimation

The ability to estimate is vital to the consumer. "How many" will you get for a pound? Will the bed "fit" in the space allotted? How much "difference" is there between two containers? Such questions often need to be answered in a matter of seconds.

5.1.4 Use cost of time as well as item cost to compare home produced versus convenience item.

Multiplication and division

The cost (or value) of the time used as well as the cost of the item should be considered when making a selection between home produced and convenience products. Sometimes a convenience product will be cheaper. Also, some convenience products are no more expensive than that made at home even without the time factor.

5.1.5 Compute some basic household costs by:

- accurately reading an electric meter
- checking an electric bill
- figuring the cost of operating an electrical appliance
- reading the gas meter

Multiplication, addition, percent

All bills should be checked for accuracy, but with energy costs high, checking bills means one can make choices on the use of energy sources. High electric bills can mean that a change in food purchases may be needed, or different patterns of using the energy should be considered.

<u>Performance Indicators</u>	<u>Basic Skill(s)</u>	<u>Taxonomy</u>
5.1.5 (cont.) <ul style="list-style-type: none"> • checking a gas bill • reading the water meter • checking the water bill • checking a telephone bill 		
5.1.6 Determine percent of minimum daily requirements in servings by computations made using a nutrition label on a box or can.	Percent	Voluntary nutritional labeling regulations established by the Food and Drug Administration went into effect in 1974. All foods to which a nutrient has been added, or foods for which a dietetic claim is made, must have a nutritional label.
5.1.7 Study the advisability of buying a car by determining: <ul style="list-style-type: none"> • annual depreciation • rate of depreciation • mileage and gas cost using the metric system. • insurance • sales tax • property tax 	Multiplication, division, metrics	Cars are affected by planned obsolescence (superficial changes to increase sales) and built-in obsolescence (under-engineering so that product wears out).
5.1.8 Use a table of parcel post rates to determine the cost of shipping a package.	Multiplication	Annual operating costs might include gasoline, taxes, loan payments, repair and maintenance and insurance.
5.1.9 Determine the ratio of the diameter of two gears by counting the number of turns of each gear.	Geometry	If a purchase is to be shipped, then weight and size should be considered before the purchase is made.
5.1.10 Using rectangular food containers determine: <ul style="list-style-type: none"> • volume • area of each side • total surface area of each box 	Geometry	Any item with working parts should be studied carefully to determine efficiency and construction details.
		Boxes of different shapes give varied (and often false) illusions of the amount of their contents.

<u>Performance Indicators</u>	<u>Basic Skill(s)</u>	<u>Taxonomy</u>
5.1.11 Using a selected quadrilateral draw a floor tiling plan.	Geometry	The selection of building materials with definite lines will bring about varied appearances in the completed project.

6. ADVERTISING AND OUR SOCIETY

Goal: The student will be able to recognize and discriminate between informational advertising, selling aids, and motivators which meet the needs, wants and interests of the consumer.

Specific Objective: 6.1 Students will gain an understanding of the purposes and techniques of advertising.

Mathematics Contribution: Considerable advertising is concerned with prices -- the amount to be saved by a particular purchase. The statements are apt to be misleading if the consumer is unable to complete the mathematics used to persuade the audience of the value to be gained by purchasing the item.

<u>Performance Indicators</u>	<u>Basic Skill(s)</u>	<u>Taxonomy</u>
6.1.1 Read and interpret a bar graph; a circle graph; a line graph; a table.	Graphs, tables and percent	Many advertisements in graph or table form can be found in newspapers, magazines, on posters, billboards, in the mail and on TV. Some of them can be misleading.
6.1.2 Determine actual price from a sales ad stated in percents. Compare with another ad stated in actual amount saved.	Percent	Many eye-catching ads imply large savings. However the actual amount saved may actually be insignificant.
6.1.3 Compute savings when the item advertised is measured in metrics.	Metrics	Many items now show contents, size or weight in metrics. This same measurement is also shown in the advertisements for the item.

Performance Indicators

6.1.4 Estimate the savings to be made on a sales item in an advertisement.

7. RESPONSIBLE BUDGETING

Goal: Developing the ability and concept of personal budgeting to satisfy the wants and needs of groups and individuals.

Specific Objective: 7.4 The student will understand the mechanics of setting up a record keeping system.

Mathematics Contribution: Once the consumer understands the philosophy of budgeting, most of the remaining work in financial planning is actually mathematically based.

Performance Indicators

7.4.1 Interpret a table and/or chart showing pattern of family spending.

7.4.2 Using an expenditure record sheet, determine the percent spent in each of the following areas:

- food
- clothing
- housing
- transportation
- personal
- savings

Basic Skill(s)

Estimation

Taxonomy

It is often necessary to make a quick judgement concerning the value of a sales price. Excellent practice in estimation can be achieved by practicing with advertisements.

Basic Skill(s)

Charts and tables

Taxonomy

The purposes of a financial plan are to set direction, establish pace, and set a limit or boundary. A great deal can be gained by studying tables and charts which have been developed by computing averages. These should be "guides", not "compulsory allotments".

A financial plan is meaningless unless it relates to a "picture" of expenditures and income of the individual. Each person differs in how financial planning is viewed.

Performance Indicators

7.4.3 Using a budget plan and an expenditure record sheet, compare what was spent with what had been planned. Make comparisons in percents.

7.4.4 Using a set of provided figures determine the amount of gross income and the amount of net income as well as the percent of the net income as compared with the gross income.

Basic Skill(s)

Percent

Taxonomy

A budget should be flexible enough to allow for reasonable changes in spending. It is necessary to decide what is "reasonable".

8. INSURANCE

Goal: Understanding the role of insurance in maintaining personal and family security.

Specific Objective: 8.3 The student will understand how to select the company, type of coverage, and level of coverage.

Mathematics Contribution: All insurance involves mathematics. In fact it is only through mathematical computations that one can make intelligent decisions concerning kinds and amounts of insurance to purchase.

Performance Indicators

8.3.1 Homeowners Insurance

Define:

- Standard fire policy
- Extended coverage
- Liability insurance
- Homeowner's insurance

Basic Skill(s)

Definitions

Taxonomy

Definitions:

- Standard fire policy - insurance against losses caused by fire and lightening.
- Extended coverage - insurance against losses from wind, smoke, hail, riots, explosions, falling planes, and cars and trucks as well as fire and lightening.

Performance Indicators

8.3.1 (cont.)

Basic Skill(s)Taxonomy

- Liability insurance - protection against lawsuits for injuries suffered by another person on your property.
- Homeowner's insurance - usually covers all the items in a fire policy and extended coverage as well as loss from theft, personal liability and the cost of living in a hotel while your house is being repaired.

8.3.2 Determine the annual premium rate on a homeowner's policy.

Division and multiplication

Property insurance premium rates are usually based on \$100 units of insurance. The amount of coverage you buy on your home determines the amount of coverage. Property may be covered for full value or for some percentage.

8.3.3 Determine the settlement of a fire loss when coinsurance is used.

Division, multiplication, and percent

Under a coinsurance clause, a company will pay the full amount of any loss up to the face of the policy only if the owner has insured the property for a certain percent of its value. The percent is usually 80%.

$$\text{Amount paid by} = \frac{\text{Face of Policy}}{80\% \text{ of value}} \times \text{of loss the of property Company}$$

8.3.4 Car insurance

Define:

- Bodily injury
- Property damage

Definitions

Definitions:

- Bodily injury - owner's liability for injury to other persons.

Performance Indicators

8.3.4 (cont.)

- Comprehensive damage
- Collision
- Deductible collision

Basic Skill(s)

8.3.5 Using tables, determine the total annual premium for bodily injury and property damage coverage for three cars.

Tables, percent

8.3.6 Life insurance

Define:

- Beneficiary
- Face Value
- Cash Value
- Term Insurance
- Straight Life Insurance
- Limited-Payment Insurance
- Endowment Insurance

DefinitionsTaxonomy

- Property damage - damage to other person's property caused by car.
- Comprehensive damage - damage to one's own car from fire, theft, vandalism, falling objects, windstorms, hail, lightening, and flood.
- Collision - damage to one's own car from collision or upset.
- Deductible collision - you pay the first part of loss and the company pays the rest.

Car insurance premiums vary with the amount of risk. For instance, insurance in cities is apt to be higher than insurance in rural areas. Premiums are also higher for cars used for business than those used for pleasure. Also, premiums change often. Tables may be obtained from insurance companies.

Definitions:

- Beneficiary - person named to receive payment from an insurance policy.
- Face Value - total amount of insurance stated in the policy.
- Cash value - amount of money you can get before its term is over or

Performance Indicators

8.3.6 (cont.)

Basic Skill(s)Taxonomy

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before it becomes payable by death.

- Term Insurance - Protection against loss of life for a certain period of time, or term. No cash value.
- Straight Life Insurance - Protection for whole life and premium never goes up. A cash value is built up. A form of permanent life insurance.
- Endowment Insurance - After premiums are paid for a certain time, you may receive the face value of the policy. If you die before expiration of the policy, your beneficiary gets the face value of the policy.

8.3.7 Using a table of annual premiums for each \$1,000 of insurance the age of the policy holder and the face of the policy, determine the annual premium for:

- 10-year Term Policy
- Straight Life Policy
- 20-Payment Life
- 20 Year Endowment

Tables

8.3.8 Using a table determine the cash value of an insurance policy.

Tables

Policies usually have a table of cash values.

- Term insurance is cheap for young, healthy individuals, but its price will increase if it is renewed when you are older.

- When you are young, the cost of straight-life insurance is cheaper than term insurance, but the premiums stay the same as you grow older.
- The premiums for limited-payment life insurance are higher than those for straight life insurance.
- Premiums are higher for endowment insurance than for other kinds of life insurance.

9. TAXES

Goal: Understanding the consumer's role and responsibilities in the local, state and federal tax structure.

Specific Objective: 9.2 The student will have the knowledge to complete various tax forms and schedules.

Mathematics Contribution: The structure of all taxation systems is based on mathematics. This objective is broadened to help the student understand tax rates and benefits.

Tax assessors put a value on each piece of taxable property. This is called the assessed valuation and is expressed in a decimal form. To find other bases, one can multiply the decimal rate by \$100, \$1,000 100 cents or 1,000 mills.

Performance Indicators

9.2.2 (cont.)

ment rate, and the tax rate (per \$100 as well as per \$1 in mills) are given.

9.2.3 Income tax

Identify the information contained on a Wage and Tax Statement (Form W-2).

9.2.4 Using provided figures, complete a 1040A Federal Income Tax Form. (Short form)

9.2.5 Using provided figures, complete a 1040 Federal Income Tax Form. (Long Form)

Basic Skill(s)

Practical problem

Practical problem

Practical problem

Taxonomy

Assessed

$$\frac{\text{Value}}{100}$$

$$X \text{ Tax Rate per } \$100 = \text{Property Tax}$$

When tax rate is given in mills, multiply tax rate per \$1 in mills by \$001.

A W-2 form may be obtained from the office secretary or school accountant.

This is best taught by providing the students with a tax form which is available from any IRS office.

Form 1040A may be used when the income is less than \$20,000 (or \$40,000 if married and filing a joint return), when the income is from wages, salaries, tips, and there is no more than \$400 in dividends or \$400 in interest. Deductions may not be itemized.

Tax forms are available from any IRS office.

- Figure tax table income. Gross income minus adjustments equals adjusted gross income.
- Figure taxable income. Total deductions minus zero bracket amount equals excess deductions. Adjusted gross income minus excess deductions equals taxable income.

9.2.5 (cont.)

- Use tax rate schedules X, Y or Z to determine tax.

10. CONSERVATION OF ENERGY AND RESOURCES

Goal: Increasing the student's core of information related to energy, ecology, and economic issues upon which students can base further inquiry, research and value judgments.

Specific Objective: 10.3 The student will identify the interrelationship among energy, ecology, and economic problems and solutions in terms for the consumer.

Mathematics Contribution: Energy and environmental problems are too often dealt with by people who have an inadequate background in mathematics and science. Practical solutions are dependent on people with a well rounded education.

10.3.1 Read an electric meter and check an electric bill.

Practical problem

The electric meter measures electricity in kilowatt-hours (a kilowatt is 1000 watts). Watts measure the total energy flowing in an electric circuit at any moment. In reading an electric meter always record the smaller number if the meter hand points between two numbers. The reading means that number of kilowatt hours of electricity have been used since the meter was installed or since it began measuring over again at 00000 kilowatt hours. To find the amount of electricity used during the previous month, subtract the previous month's reading from the current reading. The bill is then computed by using a rate schedule.

Performance Indicators

10.3.2 Determine the cost of operating three electrical appliances.

Basic Skill(s)

Practical problem

10.3.3 Read a gas meter and check a gas bill.

Practical problem

10.3.4 Read a water meter and check the water bill.

Practical problem

10.3.5 Check a telephone bill for accuracy.

Practical problem

10.3.6 Use a checkerboard map to estimate mileage.

Estimation

Taxonomy

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A 60-watt bulb means the bulb uses 60 watt-hours of electricity in one hour. This is divided by 1000 to determine kilowatts. Appliances using electric motors are rated in terms of horsepower (HP). One horsepower is equal to 746 watts. To figure cost set a price for each KWH (\$.04 for instance).

Gas meter dials are read from left to right and give a reading in cubic feet. The reading is reported in units of 100 cubic feet. The gas used may be found by subtracting the reading from the previous month from the present reading. The bill is made up from a rate table.

Water is measured by the gallon or the cubic foot. The reading shows the amount used since the last reading. Charges are made using a rate table.

The bill should be checked for the local service charge, charges for long distance or toll calls (made by direct dialing or with help and at different times of the day and week), additional calls and taxes. The local telephone directory is a help in looking at bills.

By placing a checkerboard with each side of the squares representing a certain number of miles, under a map, it is possible to estimate distances.

Performance Indicators

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10.3.7 Code large numbers which are used in relation to energy.

Basic Skill(s)

Reading, interpreting

Taxonomy

Numbers are expressed first as a power of ten, then as a word, and finally as a code. A chart of such numbers may be found in NSTA, *Energy, Environment Source Book*.

10.3.8 Interpret four linear graphs containing energy and resource

Reading, interpreting graphs

Linear graphs, similar to those of the stock market are used to give visual representations. Examples to be found include sources of pollutants, accidents from reactors, energy uses in food, environmental expenditures and an endless list. Examples should include pie-graphs, bar graphs, frequency histograms, cumulative frequency curves, pictographs, profile curves, component-paret bars.

10.3.9 Determine the potential savings in two instances in fuel bills by using house insulation.

Fractions

Problems may be used which are drawn from the following information:

- the average uninsulated home uses about 1600 gallons of fuel oil per year.
- a family may spend about 1/20th of their income on energy.
- a typical home with a roof area of 114 square meters receive 837×10^{10} joules of solar energy a year.

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10. CONSERVATION OF ENERGY AND RESOURCES

Goal: Increasing the student's core of information related to energy, ecology, and economic issues upon which students can base further inquiry, research and value judgments.

Specific Objective: 10.3 The student will identify the interrelationship among energy, ecology, and economic problems and solutions in terms for the consumer.

Performance IndicatorsBasic Skill(s)Taxonomy

10.3.1 Design four linear graphs containing energy and resource information.

Constructing graphs

Word problems which may be derived from sources such as NSTA, Energy-Environment Source Book may be used for students to do their own graphs. Even better are problems which use data from the local community. A local energy office would be helpful in supplying information.

10.3.2 Interpret two semilogarithmic graphs containing energy and resource information.

Reading, interpreting graphs

These graphs are used when a quantity changes during the period of concern by more than a factor of 10. To emphasize fluctuations when a quantity spans a wide range equal distances are used which are equivalent to equal logarithms rather than equal numbers.

10.3.3 Design two semilogarithmic graphs containing energy and resource information.

Constructing graphs

The NSTA, Energy-Environment Source Book is an excellent source of material to graph. However, information supplied by an energy office might provide figures more "fun" to use.

10.3.4 Interpret two semilogarithmic graphs in which displayed quantities increase in value exponentially.

Reading, interpreting graphs

When a quantity's net increase over a given period of time depends on its size at the beginning of that period, it grows exponentially with time.

Performance Indicators

10.3.4 (cont.)

10.3.5 Design two semilogarithmic graphs containing energy and resource information.

10.3.6 Verify on a semilogarithmic scale the time it takes for a quantity to double in size.

Basic Skill(s)

Constructing graphs

Reading, interpreting graphs
Using Mathematics to projectTaxonomy

$$\frac{\Delta N}{\Delta t} = rN$$

when:

N = quantity growing with time

 ΔN = the change in N Δt = the time period

r = the constant-percentage

increase during Δt .

The exponential growth curve on a semilog plot in a straight line is preferred because it is easily projected or extended in either direction.

The energy office can supply excellent information to be used for these graphs.

Doubling time is constant for exponential growth. Doubling time is an important concept in studying energy because many of the difficulties of the energy crisis are due to the doubling time of electric energy consumption which is 10 years--a short time in which to build generating facilities.

$$T_{\text{double}} = \frac{70 \text{ years}}{r \text{ (percent per year)}}$$

Performance Indicators

10.3.7 Interpret two equations of proportionality.

Basic Skill(s)

Proportion

Taxonomy

Proportionality tells us how one quantity depends on another. For example:

$$A \propto r^2$$

when:

A = area of circle
r = radius

or

$$E \propto "$$

when:

E = energy available
N = gasoline we have

10.3.8 Develop two formulas which have a basis in proportionality.

Proportion

To make an equation out of a proportionality a constant is needed. Symbolizing the constant as k, the area of a circle may be written as Area (circle) = Kr^2 . Since K is obviously π , we arrive at the formula:

$$A = r^2.$$

In the proportion for gasoline and energy the equation becomes:

$$\text{Energy} = K \times N \text{ (gallons)}$$

If energy is in Calories, then K = 33,000 Calories per gallon and the equation becomes:

$$E \text{ (Calories)} = 33,000 \frac{\text{Calories}}{\text{gallons}} \times N$$

Then, if N = 10:

$$E = 3.3 \times 10^5 \text{ or } .33M \text{ Calories}$$

<u>Performance Indicators</u>	<u>Basic Skill(s)</u>	<u>Taxonomy</u>	
		<u>Method</u>	<u>Q (10¹⁵)</u> <u>Calories</u>
10.3.9 Determine the amount of energy saved in two instances by wise usage.	Fractions, applications	Potential energy savings from low-cost measures in 1977 (Fowler).	
10.3.10 Determine the increase and decrease in two energy consumption rates in personal and/or national situations.	Percents, applications	Thermostat Setback Heating (68 day/60 night) Water heating (120) Air-conditioner Reduce hot water use by 1/3 Furnace tune-up Air conditioning tune up	.37 .15 .03 .12 .15 .23

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Instructions for Making Instant Slides

1. Divide page of paper into 2" X 2" squares.

- For #127 slide holder, make inner squares of one and seven-sixteenths inch x one and seven-sixteenths inch.
- Draw material on inner squares.
- Run the master sheets through a transparency making machine.
- Cut each frame on the lines for the outer space.
- Put each section in a #127 slide holder.
- Seal with a hot iron.
- Color if desired (colored pens may be used or diazo).

CONSUMER CITIZENSHIP GRID

COMPONENT 1: Basic Economics in the Marketplace

GOAL: Understanding the nature of the basic economic problem of scarcity where people, with unlimited wants and needs, live in a world of limited resources.

Specific Objective		Math	English	Social Studies	Science
1.1 The student will be able to identify and explain the basic elements of the contemporary American market system.	--	X	X	--	
1.2 The student will develop an awareness of the interaction between supply, and the price mechanism.	--	X	X	--	
1.3 The student will understand how consumer decisions influence the use of personal resources to maximize satisfaction.	--	X	X	--	
1.4 The student will understand that each consumer decision made involves a "trade-off."	--	--	See 1.51	--	
1.5 The student will understand the interdependent nature of the market system.	--	X	X	--	

COMPONENT 2: Credit

GOAL: Understanding that credit properly used is a tool to reach economic goals.

2.1 The student will identify the role of credit in personal money management.	--	X	X	--	
2.2 The student will recognize types, sources and costs of credit for different purposes.	X	X	X	--	
2.3 The student will understand the benefits of establishing a sound credit rating.	--	X	X	--	
2.4 The student will understand the use of credit in terms of present and future needs, wants, expenses and income.	--	X	X	--	
2.5 The student will understand the decisions that come into play influencing borrowing.	--	X	X	--	
2.6 The student will be aware of the dangers inherent in the over use of credit.	--	--	X	--	

COMPONENT 3: Consumer Law/Protection

GOAL: Increasing the students' understanding and knowledge of their role as consumers especially the legal rights and responsibilities that insure the bargaining power of all parties.

3.1 The student will be able to understand the basic elements of a contract: offer, acceptance and consideration and mutual agreement.	--	X	X	--	
3.2 The student will understand the need for social controls, e.g., warranties and consumer law, relative to consumer credit, deceptive trade practices, truth-in-lending, and debt collection.	--	X	X	--	
3.3 The student will become acquainted with agencies of protection from fraudulent consumer schemes.	--	X	X	X	
3.4 The student will become acquainted with concure remedies for contract and tort problems.	--	X	X	--	
3.5 The student will be able to define related terms including the following: collateral, conditional, default, declining balance, promissory note, discounted loan, installment buying and repossession.	--	X	--	--	

COMPONENT 4: Banking Skills (Checking and Savings Accounts)

GOAL: Understanding the role of banking and lending institutions as the bridge between savers and borrowers, those paying and those saving money.

4.1 The student will identify the differences between savings and lending agencies and the various services provided by each.	--	--	X	--	
---	----	----	---	----	--

COMPONENT 4 (cont.): Banking Skills (Checking and Savings Accounts)

Specific Objective		Math	English	Social Studies	Science
4.2 The student will understand the services provided by a bank or savings and lending institution.	--	--	See 4.1	--	
4.3 The student will learn how to select a bank or savings and lending institution.	--	--	X	--	
4.4 The student will know the mechanics and responsibilities of maintaining a checking account.	X	--	X	--	
4.5 The student will know how to develop a sound savings plan.	X	X	X	--	

COMPONENT 5: Comparison Shopping for Goods and Services

GOAL: Developing the skills, understandings and techniques of sound shopping habits for goods and services.					
5.1 The student will be able to differentiate between impulse buying and comparison shopping.	X	X	X	--	
5.2 The student will understand the basic provisions and responsibilities contained in warranties and guarantees.	--	X	--	--	
5.3 The student will be able to identify the different methods used by producers and retailers to alert them to comparative value, e.g., unit pricing, labeling, advertising, store brands, sales, etc.	--	X	X	--	
5.4 The student will identify the different types of retail outlets available for consumers.	--	X	X	--	
5.5 The student will apply the techniques of comparative shopping when selecting services, e.g., insurance, health services, credit, recreation, etc.	--	X	X	--	

COMPONENT 6: Advertising and Our Society

GOAL: The student will be able to recognize and discriminate between informational advertising, selling aids, and motivators which meet the needs, wants and interests of the consumer.					
6.1 Students will gain an understanding of the purposes and techniques of advertising.	X	X	X	--	
6.2 Students will be able to identify consumer needs, wants and interests based on values.	--	X	X	--	
6.3 Students will be able to recognize and categorize emotional appeals in advertising.	--	X	X	--	
6.4 Students will be able to identify and classify motivational techniques in advertising.	--	X	X	--	
6.5 Students will be able to identify propaganda techniques used in advertising in all types of media.	--	X	--	--	
6.6 Students will be able to identify international sources of advertising: e.g., classified ads, periodicals, educational materials from business, industry, and professional organizations.	--	X	X	--	

COMPONENT 7: Responsible Budgeting

GOAL: Developing the ability and concept of personal budgeting to satisfy the wants and needs of groups and individuals.					
7.1 The student will understand the value of the budgeting process.	--	--	X	--	
7.2 The student will understand the interrelationships among the budgeting of time, energy and money.	--	--	X	--	
7.3 The student will identify the steps involved in constructing a personal budget.	--	-	X	--	
7.4 The student will understand the mechanics of setting up a record keeping system.	X	--	X	--	

COMPONENT 7 (cont.): Responsible Budgeting

Specific objective	Math	English	Social Studies	Science
7.5 The student will be aware of the need for flexible budgeting due to changes in the economy, personal life style and family.	--	X	X	--
7.6 The student will understand the consequences of unsound budget practices.	--	--	--	--

COMPONENT 8: Insurance

GOAL: Understanding the role of insurance in maintaining personal and family security.				
8.1 The student will understand the underlying principles of insurance.	--	X	X	--
8.2 The student will identify the various types of insurance and define the areas.	--	--	X	--
8.3 The student will understand how to select the company, type of coverage, and level of coverage.	X	--	X	--
8.4 The student will understand the relationship between changing financial status and need for insurance coverage.	--	X	X	--
8.5 The student will develop an understanding of the vocabulary and language of insurance agreements.	--	X	X	--
8.6 The student will understand what constitutes a legitimate claim and the procedure for filing.	--	--	--	--
8.7 The student will become aware of where they can seek a remedy to unsatisfactory company/vendor practices.	--	X	--	--

COMPONENT 9: Taxes

GOAL: Understanding the consumer's role and responsibilities in the local, state and federal tax structure.				
9.1 The student will understand the reasons for and types of taxes within each level of government.	--	X	X	--
9.2 The student will have the knowledge to complete various tax forms and schedules.	X	--	--	--
9.3 The student will be aware of how tax dollars are used to support various programs.	--	X	X	--
9.4 The student will be aware of community resources which can assist them in using the tax structure to their best advantage.	--	X	X	--

COMPONENT 10: Conservation of Energy and Resources

GOAL: Increasing the student's core of information related to energy, energy, and economic issues upon which students can base further inquiry, research and value judgments.				
10.1 The student will develop an awareness of challenges facing the U.S. and the resources, ecology and economics.	--	X	X	X
10.2 The student will gain an understanding how supply and demand affects energy, including its sources, patterns of usage, and predicted future output.	--	X	X	X
10.3 The student will identify the interrelationship among energy, energy, and economic problems and solutions in terms for the consumer.	X	X	X	X
10.4 The student as a consumer will make an individual plan of action to help in solving problems presented by energy shortage, threats to the environment, and related concerns.	--	X	X	X
10.5 The student will become aware of alternative sources of energy and their use for the future.	--	X	X	X

THE SLOW LEARNER

This Guide contains some learning experiences which might be used with the slow learner. Because of the wide variation in the capabilities of these students (learning disabled, emotionally disturbed, socially maladjusted) no attempt has been made to suggest which performance indicators should be used. The teacher will be the judge of what each student is capable of doing. The following description provides some understanding of the slow learner.

SOCIAL AWARENESS

Evelyn Deno (1978, p. 1) states, "Children classified as emotionally disturbed, learning disabled, or socially maladjusted in the classroom tend to be defined more by social expectations than by their personal attributes or their actual capacities to function outside the school situation. We cannot assume that children who exhibit the kinds of behavior that result in such classifications will behave the same way under all conditions or at every developmental stage; nor can we assume that their behaviors will be viewed in the same way by adults or children." A slow learner's social awareness may be of little significance. On the other hand, popularity can be a most pressing concern. A teacher of slow learners becomes absorbed in social education as well as intellectual education. The concept of mainstreaming allows the slow learner the opportunity to notice how successful children cope. It provides social awareness in an informal way.

UNREALISTIC EXPECTATIONS

A teacher must first recognize that the slow learner has individual ways of coping with problems. Changing these ways for the better will effectively add to the total education of the slow learner. Goals should be simple and flexible since the slow learner may exhibit attentional deficits, imitation deficits, motivation deficits and memory difficulties. All kinds of motivational techniques must be used for realistic outcomes to goals set by the teacher. Activities should be developed which provide for a shorter attention span. Drill exercises are good since the slow learner usually needs more practice in order to learn. More audio-visual techniques may be needed.

TEACHING CONSUMER EDUCATION

Many times consumer education cries, "let's reform." This approach is not suitable for the slow learner who lacks leadership skills. Terms which are exhilarating to the average student (junk food, loan shark) may induce fearful reactions from the slow learner. A better approach in consumerism is to help the student see how he or she can be a winner if a change in behavior occurs. One positive example of consumerism for the slow learner is to learn where one can go for help or direction.

THE SLOW LEARNER (cont.)

EXPERIENCE

The teacher will need to identify the consumer related experiences and consumer needs of the slow learner in order to build on the student's background. For these students it is important to build on real life experiences for today and avoid warnings about the future. Role playing can be quite effective, especially in instances where field trips are not possible.

THE GIFTED CHILD

Some materials are contained in the Guide to help teachers who have gifted children in their classroom. Because the degree of giftedness and even the area in which a child may be gifted varies considerably, no attempt is made to determine exact activities for any single gifted student. Instead a variety of ideas is offered from which selections can be made. It is assumed that the gifted child will receive adequate experiences to complete the performance indicators which the teacher selects. Some suggestions follow which may be helpful in understanding the definition of giftedness used in this manual.

A DEFINITION

Traditionally, giftedness has meant a high IQ score. However, in recent years, this narrow definition has been broadened to include high creativity and specific talents. It is the more broadened definition which is used in this manual. Also, rather than consider that a child is born with a "trait", and therefore a known program can be devised for the child, the philosophy accepted here is that the child goes through sets of stages, each stage succeeding the one before it. This is a developmental framework which leads to the selection of a program directed toward particular kinds of excellence.

NONELITIST

It is suggested that there be an attitude that every child has some degree of giftedness. This broadened definition includes the intellectually gifted as well as students whose exceptional performance or potential is in a single academic field, in creative or productive thinking, in visual or performing arts, in group leadership skills or in areas of dance and athletics. Even with this broadened definition, some students will "outshine" others, but every child deserves the opportunity to discover and express his own strengths. In addition the recognition and support of giftedness needs to be done in a way to avoid hostility in those who are not as gifted.

THE GIFTED CHILD (cont.)

THE INTELLECTUALLY GIFTED

For this group of children knowledge is its own reward. The attention span is longer, the learning rate is faster and their potential for abstraction is greater. Their sensitivity is keener and their need for exploration in depth is greater. Their drive for perfection may make them fearful of mistakes. For these people, new and challenging educational procedures are needed. It is a mistake, however, to think these students can go along on their own without educational guidance. The drop out rate for the gifted is three to five times greater than the rest of the population.

OTHER FORMS OF GIFTEDNESS

Other students may show higher ability in art. For these students it is often possible to study concepts in a way that the student can convey the concept to another in an art form. The same is true for a student with higher ability in drama. Students with group leadership capabilities may use that talent in developing workshops, lessons, panel groups or debates for some selected audience. Suggestions are made in the Guide, but the teacher may very well develop better ideas by watching what motivates each student.

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RESOURCES -- GENERAL LISTING INCLUDING SOCIAL STUDIES

Ackerly, Sally and Riekes, Linda. Law in Action, 2nd. ed. St. Paul: West Publishing Company, 1981. A series of law related publications suitable for the study of consumer law from grades 5-12.

Antell, Gerson and Walter Harris. Economics for Everybody. 315 Hudson Street, New York, NY 10013: Amoco School Publications, Inc. 1980. Includes the basic topics called for by the National Task Force on Economic Education providing a foundation for the development of skills to both understand the social science of economics and the everyday economic world.

Arnold, John D. Make Up Your Mind: The Seven Building Blocks to Better Decisions. New York: AMACOM, 1978.

Bittinger, Marvin. The Consumer Survival Book. Woodbury, NY: Barron's Educational Series, Inc. 1979. Written in a popular fashion with many illustrations, problems and practical approaches this book is concerned with buymanship and money management. High school and adult.

Bloom, Benjamin S., Ed. Taxonomy of Educational Objectives. New York: David McKay Company, 1956.

Boyd, Fannie Lee and Stovall, Ruth. A Handbook of Consumer Education. Boston, MA: Allyn and Bacon, Inc., 1978.

Bywater, Sharon. Using a Checking Account and Insuring Yourself and Using Credit. To the Point on Money Management. Syracuse, New York: New Readers Press, 1980. Three of a series of money management books developed for the adult but equally useful for the slow learner.

Deno, Evelyn M. Educating Children With Emotional, Learning and Behavior Problems. Washington, D.C., U.S. Office of Education, 1978, Grant No. OEG-0-9-336005-2452.

Federal Reserve Bank of Philadelphia, Department of Consumer Affairs. Your Credit Rating, How To Establish and Use Credit and The Rule of '78 or What May Happen If You Pay Off a Loan Early. Splendid resources for the credit conscious consumer.

Fetterman, Elsie and Charles Klamkin. Consumer Education in Practice. 605 Third Ave., New York, N.Y.: John Wiley & Sons, 1976. Emphasis on consumer problems and fraud, government agencies, credit and housing. Suggested as a reference for grades 9-12.

Fetterman, Elsie and Newman, Chris. Consumer Credit. Consumer Education Casebook Series. Dept. CN, 7 East 12th St., NY. Fairchild Books, 1980. Cases are used to help the high school and adult student become involved in real consumer problems.

Finkelstein, Milton, Nitzburg, Arthur and Gelormino, Gerald. Living in a Consumer's World. 50 West 23rd St., New York, N.Y. 10010: Globe Book Company, 1977. General consumer text. The basics of economics are taught through discussions of real life situations. A teaching guide accompanies the book. With a reading level of 5-6 the book is suggested for Junior and Senior high school.

Garman, E. Thomas and Eckert, Sidney. The Consumer's World. 50 West Kellogg Blvd., St. Paul, Minnesota 55165: West Publishing Co., 1978. Sections on dilemma's of the consumer and the functioning of the marketplace, effective buying of goods and services, and consumer planning for the future. Appendix includes places to seek redress. A paperback practicum-workbook accompanies the text. Suggested for grades 11-college. Would be appropriate for the gifted student.

Herbst, Judith, Muesser, Annie, Handel, Ruth. Real Life Consumer Economics. Scholastic Book Services, New York, NY., 1980.
Workbook type materials. Good for the slower learner, but also suitable in many instances for the average student.

Jelley, Herbert M. and Herrmann, Robert. 1221 Ave. of the Americas, New York: McGraw-Hill Book Co., 1978.
High school consumers' education textbook. Suggested for grades 9-12.

Joint Council on Economic Education. 1212 Avenue of the Americas, New York, NY. 10036. Teaching Personal Economics in the Social Studies Curriculum, 1971.
Teaching a Course in Personal Economics, 1971.

Strategies for Teaching Economics: Basic Business and Consumer Education (Secondary), 1979.

Analyzing Tax Policy: A Resource Guide, 1979.

Analyzing Health Care Policy. A Resource Guide. 1977. The first of a series of resource guides focusing on economic-political analysis of contemporary public policies and issues.

Kaskins, James. The Consumer Movement. 419 Park Avenue South, New York, NY 10016: Crown Publishers, 1975.
Emphasizes what individuals can do to increase consumer awareness and effectively join the consumer movement. Suggested for grades 9-adult.

Kelly & Chamberlain. Survival: A Guide to Living on Your Own. 1221 Avenue of the Americas, New York, NY 10020: Webster Division, McGraw-Hill Book Company, 1978.
A text to help students master skills necessary to deal with the everyday problems they will have to face as consumers, homemakers, and workers. Each chapter starts with a "Survival Quiz". Teacher's Guide. Reading Level 7-8.

Levy, Leon; Feldman Robert and Saesrath Simpson. The Consumer in the Marketplace. River Forest, Illinois: Pitman Publishing Company, 1976.
Written with a personalized approach, the text consists of short instructional units. Workbook available. Grades 7-12.

Linder, Bertram and Selzer, Edwin. You and the Consumer. New York: W.H. Sadlier, Inc., 1973.
A multi-disciplinary approach with concepts drawn from all the social sciences, the business world and the home economics disciplines. Questions are used in the page margins to guide the readers thinking.

Maslow, A.H. Motivation and Personality. New York: Harper and Bros., 1954.

Maslow, A.H. (ed.) New Knowledge in Human Values. New York, NY: Harper and Row, 1959.

Miller, Roger. Economic Issues for Consumers. 50 W. Kellogg Blvd., St. Paul, MN 55165. West Publishing Co., 1981.
A consumer education text written to draw the attention of the reader through innovative presentations and detailed information on consumer issues. For example a chapter on "The Consumer Gets a Voice" is followed by Consumer Issue A: How to Get Help for Consumer Problems and Consumer Issue B: How to Use a Small Claims Court. An Instructor's manual and a study guide accompany the book. Suggested for upper grades and college. Would be appropriate for the gifted student and extremely useful as a teacher reference.

Oppenheim, Irene. Consumer Skills. Peoria, IL 61614: Chas. A Bennett Co., 1977.
General Consumer Text. A student guide and a Teacher's Guide are available. High school.

Purgraski, Carolyn, Morales, Mary Lou and Kirkpatrick, Elaine. Sorting Out Money Values. 3154 Conventry Drive, Bay City, MI 48706: CEM Company, 1980. A handbook for teachers with performance objectives, course outlines, worksheets and specific lesson plans with listed resources. Grading system also provided. A student packet of materials is available.

Raines, Margaret. Consumers' Management. Peoria, IL 61614: Chas. A. Bennet Co. Considerable detail is given to home management and planning of time. Another part of the book deals with planning, spending, credit, saving, food, clothing, housing. Teacher's guide.

Rokeach, Milton. The Nature of Human Values. New York: The Free Press, 1973.

Sampson, Roy, Morteson, William, Marlenhoff, Ira and Anderson, Howard. The American Economy: Analysis, Issues, Principles. New York: Houghton Mifflin, 1975.

Schiller, Margery Kabot. Personal and Family Finance. Principles and Applications. Boston: Allen and Bacon, Inc., 1981. Theories of personal finance with ideas for field testing the implementation of these theories. Major topics for experimental learning are woven throughout the text. Upper high school and adult.

Schoenfeld, David and Natella, Arthur. The Consumer and His Dollars. 75 Main Street, Dohbs Ferry, NY 10522: Oceana Publications, 1975.

Simon, Sidney, Howe, Leland and Kirschenbaum, Howard. Values Clarification. New York: Hart Publishing Company, Inc., 1972.

Spillman, Nancy; ed. Consumers: A Personal Planning Reader. 50 West Kellogg Boulevard, St. Paul, Minnesota 55165: West Publishing Co., 1976.

Stein, Wendy and Weeks, Doug. Making a Budget. To the Point on Money Management. Syracuse, NY: New Readers Press, 1980. This well illustrated publication, suitable for the slow learner, provides information on making a budget, balancing the budget and setting up a bill paying plan. Teacher's Guide is included.

Swagler, Roger M. Consumers and the Market. Lexington, MA: D.C. Heath and Company, 1979. Application of basic principles of economic analysis to the actual problems consumers face in the marketplace.

Tarsitano, Frank. Economics for the 80's. Columbus, OH: Xerox Education Publications, 1980.

The Story of Money. Hospital Trust Corporation, Providence, Rhode Island 02903, 1981. Suitable to help junior high school students understand how money works, how business works and how America's economic system-called free enterprise-works. Available from the Corporate Communications Department, One Hospital Trust Plaza, Providence, Rhode Island 02903, 278-8148.

Frankoff, Benjamin and Boyd, Fannie Lee. Personal Finance for Consumers. Morristown, NJ 07960: General Learning Press, 1976. Interrelationships of spending, planning, values, goals, and resources are stressed. Designed to help the student make his/her own decisions about personal money management.

U.S. Department of Commerce, Do You Know Your Economic ABC's? (Includes simplified explanation of Gross National Product and how it mirrors our economy). Write to Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Unger, Maurice and Harold Wolf. Personal Finance. Boston: Allyn and Bacon, 1973.

Warmke, Wyllie and Sellers. Consumer Decision Making. 5101 Madison Road, Cincinnati, Ohio: South Western Publishing Co., 1977.

A Jr./Sr. high school text including chapters on the market, economics, credit, money management, insurance, housing and buying guides. A student supplement is available which offers many excellent exercises and quizzes.

Wish, John R., Steely, Donald and Tritton, Stephen. The Consumer, The Art of Buying Wisely. Englewood Cliffs, NJ 07632: Prentice-Hall, 1978. Explores the relationship between the consumers and sellers in the market place and offers rules which provide guidelines for making purchases.

RESOURCES -- CONSUMER ENGLISH

Coupled with the teacher's expertise knowing where examples of consumer education exist in literature, most modern textbooks presently used in the junior and senior high schools will add to the study of consumer education for English students.

Aaker, David A. and Day, George S. Consumerism: Search for the Consumer Interest, 3rd Ed. New York: The Free Press, Macmillan Publishing Company, Inc., 1978. Forty-three articles on all aspects of consumerism provide a valuable collection of readings for the advanced high school student.

Bibby, John F., Schur, Leon M. and Watson, George G., Jr. Analyzing Government Regulation: A Resource Guide. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036, 1978. There are ten reading activities suitable for the high school student included in this resource guide.

Burtness, Paul S., PhD and Clark, Alfred T., M.S. Ed. Effective English for Business Communication. Cincinnati: South-Western Publishing Co., 1980. The main goal of this text and student manual supplies the student with as much help as possible to increase his/her ability to use English effectively in business.

Fetterman, Elsie and Newman, Chris. Retail Purchase and Mail Order: Terms of Sale. New York: Fairchild Publications, 1979. Each of the 20 case studies starts with a consumer complaint letter followed with a case summary. Suitable for high school English reading courses.

Greenspan, Nancy B. and Johnston, William L., Ed.D. Consumer Education in the English Curriculum. Center for Consumer Education Services, Edison, New Jersey, 1973. This curriculum guide provides English teachers with a course of action to incorporate consumer education in the high school classroom.

Hook, J.N. and All. Representative Performance Objectives for High School English: A Guide for Teaching, Evaluating and Curriculum Planning. New York: The Ronald Press, 1971.

How To Read Your Home Phone Bill. Available from the New York Telephone Company, 1095 Avenue of the Americas, New York, NY 10036. Designed with simplicity this pamphlet is suitable for the slow learner.

Packard, Vance. The Hidden Persuaders. New York: David McKay Co., 1957 and The Status Seekers. New York: Pocketbooks, 1959. These two books are examples of consumerism found in literature. Many such novels and major works of literature use aspects of consumerism in the main theme. The teacher's knowledge is a vital resource to bring consumerism in literature ' the attention of her/his students.

Starkey, Carolyn and Norgia Penn. You, The Buyer. New York: Globe Book Company, 1980. A workbook written by a reading specialist and an English instructor. This book stresses vocabulary and other reading skills in working with consumer problems. Suitable for Junior High School or lower level high school students.

Briefing. 28. Rhode Island Coastal Resources Management Council Newsletter. The CRMC sponsors an annual essay contest for junior high school students as well as a speakers' bureau that is available upon request to groups and classes. Contact the office at 60 Davis Street, Providence, RI 02908.

RESOURCES -- CONSUMER SCIENCE

An Educator's Guide to the Three E's: Energy/Ecology/Economics. Sears Educator Resource Series. Sears Tower, Chicago, IL, 1978. Suitable for the high school student this guide will help reveal the basic facts and misunderstandings concerning the three E's.

Award Winning Energy Education Activities For Elementary and High School Teachers and Electrical Energy: Science Activities In Energy and Factsheet. August, 1979, U.S. Department of Energy, Technical Information Center, P.O. Box 62, Oak Ridge, TN 77830. These booklets fit easily into standard courses of study and help to further student understanding of important energy issues.

Physics From Science Teacher's Workshop. New York: Parker Publishing Co., Inc., 1972. Included in this book are scores of creative, ready-to-use demonstrations for teaching high school physics and consumer science.

Chantlett, Emil T. Environmental Protection. New York: McGraw-Hill Book Company, 1979. This book is helpful to students seeking answers to environmental problems.

Copulos, Milton R., Ed. Energy Perspectives. Washington, D.C.: The Heritage Foundation, 1978. This book addresses many of the current problems facing energy usage.

Dwyer, Kathleen, Ed. Consumer Chemistry. Seattle: United Graphics Incorporated, 1977. This learning activity kit, designed to bring greater understanding to the chemistry student is filled with everyday consumer related experiences. Order from United Graphics, 1428 Howard St., Seattle, Washington 98122.

Energy Conservation Resources For Education. Department of Industrial Education, Texas A. & M. University, College Station, Texas, 1977. The 13 chapters deal with one aspect of energy which includes technical and scientific information plus activities for the lab or classroom in the middle and junior high school.

EQ, Environmental Quality Index. An annual publication of the National Wildlife Magazine. It deals with energy in relation to the environment and ecology. Available from the National Wildlife Federation, Educational Services, 1412 16th Street, N.W., Washington, D.C. 20036.

Evans, Allan R. Energy and Environment Student Manual. New Hampshire: Compress, Inc., 1980. Filled with up to date information and statistics this book will serve as an excellent reference. Available from Compress, Inc., P.O. Box 102, Wentworth, NH 03282.

Foster, Robert J. Geology. Columbus, Ohio: Charles E. Merrill Publishing Co., 1976. Since geology is related to energy and raw materials, this book may be a helpful reference.

Fowler, John, Director. Energy-Environment Source Book. National Science Teachers Association, 1975. This comprehensive guide is divided into two volumes: Volume I: Energy, Society and the Environment and Volume II: Energy, Its Extraction, Conversion and Use. Any science teacher who wishes to incorporate the complex topic of energy into the classroom will find it extremely helpful.

Goode, Stephen. The Nuclear Energy Controversy. New York: Franklin Watts, Inc., 1980.

Holtom, G., Rutherford, F.J., Watson, F.G. Project Physics. New York: Holt, Rinehart and Winston Publishers, 1981. A textbook and handbook which resulted from eight years as a curriculum development project. It makes physics easily understood and relevant.

Knight, Paul A. The Illustrated Guide to Home Weatherization for Energy Savings. New York: Hemisphere Publishing Corporation, 1980.

Kowalski, Stephen W., PhD. Consumer Education in the Science Curriculum. Center for Consumer Education Services, 1972. This curriculum clearly suggests ways in which a science teacher can relate consumers' knowledge to a science program. Available from the Center for Consumer Education Services, New Jersey Department of Education.

Kowalski, Stephen W., PhD. Consumer Science. Kendall Hunt Publishing Co., 2460 Kerper Boulevard, Dubuque, Iowa 52001, 1974. This text and laboratory manual uses everyday consumer products for science experiments from which the students better understand the application of science to everyday life.

Krenz, Jerryld H. Energy: From Opulence to Sufficiency. New York: Praeger Publishers, 1980. This book draws from several topics to develop a large picture of energy-related problems.

Lapedes, David M., Ed. Encyclopedia of Energy. New York: McGraw-Hill Book Co., 1976. This reference book is designed to help the student, librarian, scientist, engineer, teacher and lay reader with information on all aspects of energy.

Meyer, H.A. Handbook of Modern Experiments for High School Chemistry. New York: Parker Publishing Co. Inc., 1972. There are 30 detailed experiments in this book which relate chemistry to daily life.

Mini Lessons From FDA. 1981. Seven topics are covered in these mini-lessons. Three pertain to science: nutrition, food safety, drug safety. Order from Food and Drug Administration, 585 Commercial Street, Boston, MA 02109.

Murphy, James T. and Smoot, Robert C. Physics: Principles and Problems. Columbus, Ohio: Charles E. Merrill Publishing Co., 1977. This textbook and laboratory manual introduces basic physics concepts to students with a wide range of interests.

Office of Energy Education, University of Rhode Island, Kingston, RI 02801. Tel. (401) 792-2478 or 2644. Dr. Donald F. Kirwan, Director. Numerous resources and curriculum guides are available for science teachers who wish to pursue energy education. Arrangements can be made to borrow special equipment for lab experiences dealing with energy. Each year the office sponsors an energy conservation contest.

Purcell, Art, Ed. Waste Watchers Guide: A Citizens Handbook for Concerning Energy and Resources. New York: Doubleday Company, Inc., 1980. This consumer's guide reveals the national problems of waste disposal.

Science Teacher's Workshop. Best of General Science From Science Teacher's Workshop. New York: Parker Publishing Co., Inc., 1972.

This book presents a broad selection of innovative yet highly practical activities and demonstrations for teaching general science of which many can be related to consumer science.

Smoat, Robert C. and Price, Jack. Chemistry: A Modern Course. Columbus, Ohio: Charles E. Merrill Publishing Co., 1979.

This textbook and laboratory manual offers concepts and principles of chemistry in a logical order to aid the student in his study of chemistry.

Solar Energy Project. U.S. Department of Energy, January, 1979.

The Solar Energy curriculum is available in seven packets from the U.S. Department of Energy, Technical Information Center, P.O. Box 62, Oak Ridge, TN 37830.

These materials include a Teacher's Guide and Support Material, a Solar Energy Text and classroom activities divided into five areas: Junior High Science, Earth Science, Biology, Chemistry and Physics and General Solar Topics.

Special Report in the Public Interest. "Energy: Facing Up to the Problem/Getting Down to Solutions," National Geographic, February, 1981.

U.S. Department of Energy. The office of Energy Information answers energy questions over the phone and also furnishes publications full of energy data. Write for information on the products and services which the office provides. U.S. Department of Energy, Office of Energy Information Services EI-62, Forrestal Building, MS 2F-063, 1000 Independence Ave., S.W., Washington, D.C. 20585.

RESOURCES -- CONSUMER MATHEMATICS

Belstock, Alan and Smith, Gerald R. Consumer Mathematics. New York: McGraw Hill Book Company, 1980. Many aspects of consumerism. All mathematics required to deal with personal finance is included and well defined. Suitable for an advanced junior high school group or high school.

Bitterger, Rudolph and Claassen. Mathematics for Consumer Survival. Mathematics Series 1981. Prindle, Weber and Schmidt. Good for low ability students.

Fairbank, Roswell E. and Schultheis, Robert. Applied Business Mathematics. Cincinnati: South-Western Publishing Co., 1980.

Though written for the business student, this book contains a great deal of material of interest to the teacher of consumerism. Sections contain: Money Records, Metric System, Buying Problems, Borrowing Money, Saving and Investing, Home Expenses, Transportation and Taxes. A teacher's edition of problems is available.

Fairbank, Roswell E., Schultheis, Robert and Piper, Edward. Mathematics for the Consumer. 5101 Madison Road, Cincinnati, Ohio; South Western Publishing Co., 1975. Covers all areas of consumer education with required math computation skills including the metric system.

Department of Consumer Affairs. Federal Reserve Bank of Philadelphia. The Rule of 78's or What May Happen When You Pay Off a Loan Early. Splendid resource for the mathematics of paying a loan early.

Goe, William E. Consumer Mathematics. New York, NY: Harcourt, Brace and Javanich, 1979.

Investors Information Kit. New York Exchange, Department No. 1E, 11 Wall Street, New York, NY 10005. Contains five booklets which cover the language of investing, the Big Board, understanding finance statements, and bonds and preferred stocks.

Kravitz, Wallace and Brant, Vincent. Consumer Related Mathematics. New York: Holt, Rinehart and Winston, 1976.

Basic mathematics skills in numbers, decimals, measurement, fractions and percents. Application chapters follow including banking services, investments, buying and selling goods and services, income and taxes, owning a car and owning a home. Simple reading level. Book of Duplicating masters available.

Lazes, Roberta and Lang, Gertrude. Making Math Count. 50 West 23rd St., New York, NY: Globe Book Company, Inc.

A review in computation skills presented in a "life skills" setting. Part One asks students to solve everyday problems. Part Two stresses on-the-job problems. Reading level is 4. The book is suggested for Junior and Senior High School.

Locke, Flora M. Consumer Math: A Guide to Stretching Your Dollar. (Self Teaching Guides Series) 605 Third Avenue, New York, NY 10016, 1975.

Consumer information is combined with a variety of topics and appropriate math computations.

Moore, J.B. It's In Your Interest: The Consumer Guide to Savings Accounts, 1976. San Francisco Consumer Action, 26 7th Street, San Francisco, California 94103. Presents evidence that "all financial institutions are about the same" is not a true statement. Builds a strong case for a truth-in-saving law.

National Science Teachers Association. Mathematics in Energy. U.S. Department of Energy, Technical Information Center, P.O. Box 62, Oak Ridge, TN 37830.

Newton, David E. Math in Everyday Life. A Workbook. Portland, Maine: J. Weston Walch. Realistic exercises dealing with typical math-related forms and problems that people run into every week. Teacher edition available.

Price, Jack, Brown, Diene, Charles, Michael and Clifford, Miriam Lien. Mathematics for Today's Consumer with Career Applications. Columbus, Ohio: Charles E. Merrill Publishing Company, 1979. The book is made up of five units: Money Management, Consumer Decisions, Useful Measures and Data, Measurement and Estimation and Career Corner. There is also a Diagnostic Skills Review. The reading level and mathematical skills required are low enough to be suitable for the lower student. Duplicating masters available.

Rosenberg, R. Robert and Risser, Joy. Consumer Math and You. New York: Gregg Division/McGraw-Hill Book Company, 1979.

Materials are at a fairly low reading level and problems are simple but extremely practical. Contents include, Earning and Budgeting, Banking and Credit, Living Expenses, Transportation and Managing Money. An Activity Guide is available.

Sobel, Max A. and Maletsky, Evan M. Essentials of Mathematics With Consumer Applications. Lexington, Mass. Ginn and Company, 1977.

The emphasis is mathematics, but at regular intervals consumer problems are introduced. The authors state that the book is intended for those students at the secondary level who are not enrolled in a formal algebra-geometry sequence. The teachers edition contains excellent teaching suggestions.

RESOURCES -- CONSUMER CATALOGUES

Catalogue of Publications, 1980. Available from Consumer Product Safety Commission, Boston Regional Office, 100 Summer Street, Room 1607, Boston, MA 02110. Tel. 617-223-5576.
This catalogue lists the publications which describe common hazards associated with the use of consumer products. The science student will find this information helpful in conducting laboratory experiments or demonstrations.

Checklist. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.
Lists the materials available in personal and general economics geared for the elementary, junior and senior high and college levels.

Consumer Bibliography, May 1980. Available from the Federal Trade Commission, 150 Causeway Street, Boston, MA 02114.
This publication provides names of directories, manuals, law and legislative sources, bibliographies and periodicals as well as FTC brochures.

Consumer Education Catalogue, March 1980. Available from the Federal Reserve Bank of Boston, Bank and Public Information Center, 600 Atlantic Avenue, Boston, MA 02106.
A description of publications, programs, and films suitable for the high school student.

Consumer's Resource Handbook, December, 1979.
Assistance in locating the right source of help from both governmental and nongovernmental sources for satisfying problems with products and services. It also includes a directory of Federal agencies giving brief descriptions of the services they offer. Included also is a list of state and local government offices. Write Consumer's Resource Handbook, Consumer Information Center, Dept. 532 G, Pueblo, Colorado 81009.

Consumidor, Sabias Que? Consumer, Did You Know? U.S. Department of Education, October, 1980.
A bilingual guide for the Hispanic consumer. It emphasizes the responsibility of each consumer to become informed of existing resources and to understand consumer laws, rights and methods of recourse. It provides information on daily needs such as food, housing, health and transportation. Available from the Executive Director, Consumer Affairs Council, 409 Old Executive Office Building, Washington, D.C. 20500.

Guide To Instructional Resources for Consumers' Education, 1977.
Helpful references of all kinds for the classroom teacher. Order from Materials Request Desk, Room 5624, ROB-3, U.S. Office of Education, Washington, D.C. 20202.

Rhode Maps: Mapping Alternatives for Promising Students Resource Guide, October, 1980.
This guide provides information for teachers who design programs and services for the gifted and talented student. Available from R.I. Department of Education, Information Services, 235 Promenade Street, Providence, RI 02908.

Social Studies School Service Catalogue, 1981. Available from Social Studies School Service, 10,000 Culver Blvd., Dept. II, P.O. Box 802, Culver City, CA 90230.
This catalogue is filled with all the resources a social studies teacher could hope to find. It is suggested you request one.

RESOURCES -- AGENCIES AND ORGANIZATIONS

Journals, newsletters, monographs and catalogs are available from the organizations and agencies listed below. For all federal, state and local agencies refer to the Consumer's Resource Handbook listed under Resources -- Consumer Catalogues.

AFL-CIO
Education Dept.
815 16th St.
Washington, D.C. 20006

American Council on Consumer Interests
162 Stanley Hall
University of Missouri
Columbia, MO 65211

American Dental Association
211 E. Chicago Ave.
Chicago, IL 60611

American Home Economics Association
2010 Massachusetts Ave., NW
Washington, D.C. 20036

American Stock Exchange
86 Trinity Place
New York, NY 10006

Association of Home Appliance Manufacturers
20 N. Wacker Dr.
Chicago, IL 60606

Better Business Bureaus, Inc.
1150 Seventeenth St.
Washington, D.C. 20036

Better Business Bureau of Rhode Island, Inc.
248 Weybosset Street
Providence, RI 02903

Cereal Institute, Inc.
135 Lasalle St.
Chicago, IL 60603

Dow Chemical Co.
P.O. Box 68511
Indianapolis, Indiana 46268

Federal Deposit Insurance Corporation
Office of Bank Customer Affairs
550 17th St., NW
Washington, D.C. 20429

Fund for Education in Economics
(Am. Bankers Assoc.)
1120 Connecticut Ave., NW
Washington, D.C. 20036

Future Business Leaders of America
Phi Beta Lambda, Inc.
1908 Association Dr.
Reston, Virginia 22091

CERN - Consumer Education Resource Network
1555 Wilson Blvd., Suite 600
Rosslyn, Virginia 22209

Chamber of Commerce of the United States
1615 H St., NW
Washington, D.C. 20006

Changing Times Education Service
1729 H St., NW
Washington, D.C. 20006

Citibank
Consumer Views
399 Park Ave.
New York, NY 10022

Consumer Credit Education Foundation
National Consumer Finance Association
1000 Sixteenth St., SW
Washington, D.C. 20036

Cooperative Information Center
State Office, Kingston, RI 02881

Consumer Information Center
Pueblo, Colorado 81009

Consumer Union
256 Washington St.
Mt. Vernon, NY 10550

Credit News Bureau
P.O. Box 6596
Houston, TX 77005

Memphis St. University
Tennessee Consumer
Dept. of Office Admin.
Memphis, TN 38152

Mobile Home Manufacturers Association
P.O. Box 201
Chantilly, Virginia

Sears, Roebuck and Co.
Consumer Information Services
Dept. 703-Public Relations
Chicago, IL 60611

The Conference Board, Inc.
85 Third Ave.
New York, NY 10022

U.S. Government Printing Office
Superintendent of Documents
Washington, D.C. 20402

General Electric/Hotpoint
Consumer Institute News
General Electric Company
Appliance Park
Louisville, Kentucky 40225

General Mills Consumer Center
P.O. Box 1113
Minneapolis, Minnesota 55440

Household Finance
Money Management Institute Memo
Prudential Plaza
Chicago, IL 60601

Institute of Life Insurance
277 Park Ave.
New York, NY 10017

J.C. Penney Company
Consumer Affairs Dept.
1302 Ave. of the Americas
New York, NY 10019

Kellogg Company
Dept. of Consumer Services
235 Porter Street
Battle Creek, MI 49016

Vitamin Information Bureau
383 Madison Ave.
New York, NY 10017

SPECIAL RESOURCES FOR AUDIO VISUALS

Because of the magnitude of learning kits and audio visual aids, it is suggested that you write to major publishers for detailed information. A few addresses are included here.

Changing Times
The Kiplinger Washington Editors, Inc.
1729 H Street, NW
Washington, D.C. 20006

Educational Audio Visual, Inc.
Pleasantville, NY 10570

National Magazine Filmstrips
333 SW Park Ave.
Portland, Oregon 97205

Parents Magazine Filmstrips
Box 1000
Elmsford, NY 10523

The Center for the Humanities
Communications Park
Box 1000
Mount Kisco, NY 10549

Traveler's Life Insurance
40 Westminster
Providence, RI